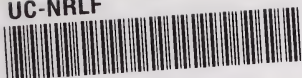
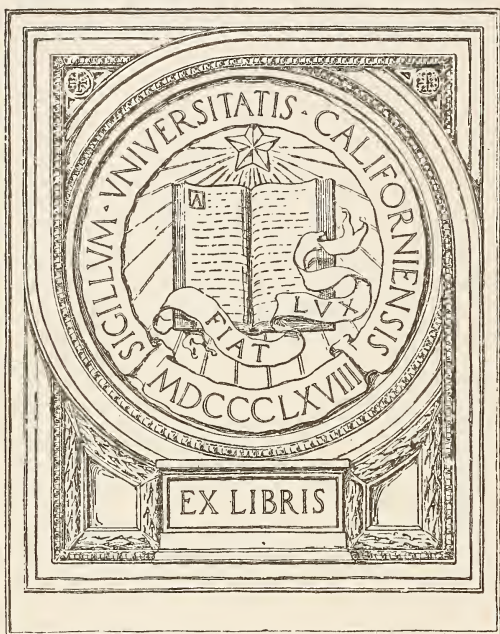


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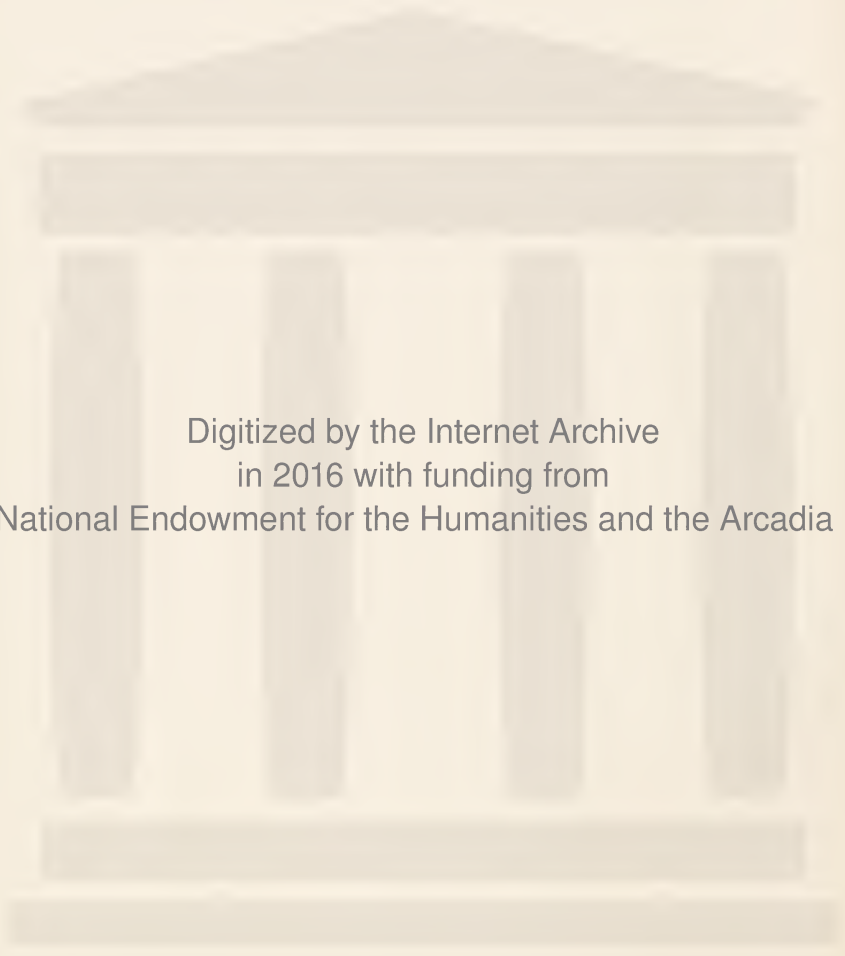












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CLAUDIUS GALEN. (A. D. Circa 131—200.)

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(Read at the meeting of the Bergen County Medical Society, September 9th, 1924)

Claudius Galen, student, nay more, *scholar*, hard worker, keen observer, prolific author, whose sayings and writings were the lore and the law of medicine for centuries, whose name is still the label for certain portions of this anatomy of ours, and still distinguishes the drugs which we know as "the galenicals."

I invite you to join me in forsaking, for an hour, the beaten paths of scientific medicine, remembering meanwhile, the dictum of our sarcastic friend, Oliver Wendell Holmes,—“the physician who is only a physician is not apt to be a very good physician.

Claudius Galenus or Galenos, usually known by the anglicized form of his surname, Galen, was born in the city of Pergamus, in the year 130 or 131 A. D. His father, Nikon, an architect, as we gather from Galen's writings, was a man of the rather liberal Greek culture and education of the day, and in easy circumstances financially. The city of Galen's birth was at this time capitol of the province of the same name, second only to Alexandria among the cities of the East in importance, in general culture and elegance, and famous alike for its magnificent acropolis and its splendid library, which was ranked next to that founded by Ptolomey. In this most favorable atmosphere, then, our illustrious namesake first saw the light, and here he passed his boyhood amid surroundings that were redolent of learning and refinement. He had barely finished his preliminary studies when he had a vision in which the deified Esculapius besought him to study and practice medicine. He thus started upon his mission under the inspiration of a more direct exhortation than most disciples of our profession can claim.

Galen evidently set out upon his studies with the intention of getting the best education that the age afforded. After having obtained all that the school at Pergamus offered, and its Asclepion, or temple to Esculapius, was very renowned, he studied successively at Smyrna, Corinth and Alexandria, all of which places were thoroughly imbued with the Greek culture of the day. He returned

to Pergamus at the age of twenty-nine, which suggests that his studies were pretty well matured, and was promptly appointed physician to the school of gladiators, this being the nearest to a college football eleven that the town possessed. He practiced here for five years, with steadily growing reputation, and then went to Rome, whither his fame had preceded him. Here he enjoyed a lucrative practice among a wealthy and influential clientele for about four years, at the close of which time he was offered the highest position then obtainable in our profession,—that of physician to the Roman Emperor. He declined this signal honor, however, and returned to Pergamus; but after a short period he was peremptorily summoned to Rome to attend the emperor, who was none other than that Marcus Aurelius whose classic "Meditations" still delight us.

Galen lived during the reign of Antoninus Marcus Aurelius and his degenerate son, Commodus, and it is worth our while to recall what Rome and the Roman Empire were, during this second century after Christ. So far as the empire is concerned, its boundaries were: on the north, the British Channel, the German Ocean, the Rhine, the Danube, and the Euxine Sea; on the east, the Euphrates, and the Syrian desert; on the south, the great African desert; and on the west, the Atlantic. Its area was about a million and a half square miles, and including as it did, nearly all of the then known world, it was, relatively, by far the most powerful state that has ever existed.

Rome, the imperial city where Galen had now taken up his residence, was at the height of her magnificence; a city of splendid public buildings and private palaces; the city of the Circus Maximus and the baths of Caracalla, and the arch of Trajan, and the gladiatorial combats; a city of limitless luxury and—for the old Roman virtues were fast disappearing—of endless profligacy. And this was a city where even the wife of Aurelius became famous for her amours, and a brilliant wit of the day pronounced the celebrated proverb, "*Romae, nulla femina nunquam negat.*" The pictures given us by General Wallace in "*Ben Hur*," and by Sienkevicz in "*Quo Vadis*" may well serve to visualize to us the splendor of the day. If a Roman partician did not boast a motor car, he had his litter and carriers, which were just as good, if not quite so fast. If he did not own a yacht, he had his own private trireme which was just as speedy. He had his feasts of Lucullus, and his games in the Circus Maximus were the most elaborate that the world has ever seen.

The position, socially and professionally, of physicians, was at this time an enviable one. Several circumstances aided Galen's prestige. First, he was a foreigner, and "a prophet is not without honor"—doubtless applied as well then as now; second, he was a Greek, although a Roman citizen, of course; and Rome did not hesitate to acknowledge her indebtedness to Grecian literature and culture. His fame, I have said, had preceded him, and he was speedily called to minister to some very prominent families. He probably made the most of his opportunities, for he was sufficiently supercilious, arrogant and egotistic to have deserved a position on any modern faculty. And we may judge that the ethics of the day were somewhat loose, for Galen did not hesitate to tell a patient that he had probably never before been under the care of an educated

physician; yet who can wonder at his impatience with the shams and pretensions of the day?

Galen's practice, at this time, was more than fairly lucrative. The ordinary fee for a visit was about thirty cents; but as Galen mentions a fee of \$2100, we may assume that his average did not look like thirty cents. His practice, in fact, was not very large, but it was very select. This apparently, was his own arrangement, for he valued other things more than money, and wanted time for his anatomic and physiologic demonstrations, and especially for his voluminous writings.

He made much of his study and knowledge of anatomy; and yet it was mainly comparative anatomy, after all, for Galen's best subjects were apes, since human dissection was not in vogue, and necropsies were practically unknown. He mentions, in his earlier writings, his having found, on one of his journeys, the skeleton of a robber who had attacked a traveller, but whose intended victim had promptly turned the tables. The natives had declined to inter the ill-advised highwayman, and the vultures had done such a thorough dissection that the remains made an excellent study in osteology. Galen descants upon his good fortune, and exhorts his pupils to watch for and avail themselves of any similar opportunity. His demonstrations in anatomy were his hobby, for he became an expert dissector and he frequently invited his influential friends, and even the emperor himself, to attend them. In fact, as I become better acquainted with Galen, I am led to the conclusion that he was his own best press agent. Yet there was much excuse for his egotism. Besides being a very good anatomist, he was equally good as a physiologist. He demonstrated the heart and its valves, and, in fact, came within an ace of beating Harvey to the discovery of the circulation of the blood. How he missed it is unexplainable, for dismissing offhand the belief of his predecessors that the arteries carried air only,—aet-tetoo—he opened a living animal, tied the aorta in two places and showed his students the blood in the living artery. He recognized the heart as the center of the circulatory system, and its contractions as the cause of the pulse, of which he noted many varieties, and about which he wrote his treatise, "*De pulsibus*"—concerning the *pulse*. How did he escape discovering the circulation, especially since his physiologic experiments taught him the use and value of the ligature, and he thus anticipated Ambroise Paré by more than fourteen centuries? Yet after his death the ligature was forgotten!

Galen studied the nervous system with unusual thoroughness and correctness for his day. His predecessors believed that the nerves originated in the heart; he discovered and taught that the brain was the great center of the nervous system. He demonstrated the cerebrospinal axis, differentiated the motor and sensory nerves, and quite thoroughly isolated the nerves of special sense. In his studies of the circulation, he noted and asserted a fact which even Harvey, fifteen centuries later, did not observe, that there is a terminal communication between the veins and arteries; and he undoubtedly originated, as he certainly used our word, *anastomosis*: "The arteries and veins anastomose with each other throughout the whole body, and exchange with each other blood and spirits by certain invisible and exceedingly minute passages"; this from his treatise "*De Usu*



Partium". What do you think of that for a man who had never dreamed of the use of the microscope?

I have mentioned that Galen was physician to the school of gladiators at Pergamus, and I have an interesting note in regard to his surgical work in that connection. If we recall what the gladiatorial combats of the day were, we must assume that he had some pretty serious cases. Of course the unsuccessful contestants either perished in the combat, or, desperately wounded, helpless, and regarded as of no further use, found their appeals to the throng for mercy met with the inverted thumb—"pollice inverto"—and the knife in the throat. Yet the victors must have presented some interesting surgical problems. What Galen's ultimate results were, we cannot know; but any one of us may envy him his mortality record, which was 0; recoveries, 100%.

In achieving this remarkable result, he made very free use of the native red wine as a dressing. Now this wine contained considerably more than 2.75% of what is called "kick"—probably between 10% and 15% of alcohol. And so, using alcohol instead of chlorin as a germicide and antiseptic flush, he anticipated the Carrel-Dakin method by about eighteen centuries, and, if his record is correct, surpassed its achievements.

This remarkable record was well substantiated by his various successes at Rome, and so it is not at all surprising that very shortly after his return to Pergamus, he was summoned back to the imperial capitol, by Marcus Aurelius to attend him as his personal physician. This attendance Galen continued until the emperor's death, when, in turn, he became physician to his son and successor, the brutal Commodus. About the only thing that I have against Galen is that he kept Commodus alive over several unnecessary years, until the dagger of his last mistress rid the earth of him. Commodus must have given Galen several anxious moments. Here is a bulletin that has almost a modern and very natural sound:

"Id. Septembris, A. U. C., 1911.

Imperator somnavi bene.

Pulsus rapidus:

Defecatio normalis:

Micturitio difficilis:

Glandula prostatica in statu quo ante manet."

We cannot justly appraise the accomplishment of Claudius Galen without at least a brief survey of the field of medical knowledge as he found it. We have seen that medical schools existed in several cities of the empire, especially those of the east—Corinth, Smyrna, Pergamus, and Alexandria. These schools usually had as their center, the Asclepiön, or temple to Esculapius. These, of course, were under the control of the priests, whose very living depended upon the votive offering of the wealthy invalids who made pilgrimages to these shrines; and so, nearly all of the medicine of the day was a veritable hodge-podge of error, dogmatism, empiricism, superstition, sacredotalism, of mystery and magic, of downright charlatanism. The physician might make the diagnosis, if he could, but the priest, by studying the flight of birds or the entrails of sacrificed animals, would probably furnish the prognosis, and an approved amulet was worth more than a dose of medicine at any time.

Of course, sincere effort had been made, although only sporadically, to attain some definite knowledge of anatomy and physiology before the time of Galen. Hippocrates had been an earnest and conscientious student, and dissection of the human body had been practiced especially in the Alexandrine school. Physiology, however, because of utter lack of anything like laboratory experimentation, was a matter of mere guess work or influence. The physicians of the day, however, made much of physical examination, enlarging a great deal upon their inheritance from their Greek predecessors. They gave very close attention to the patient's statement of his symptoms, often drawing him out at considerable length. They noted with great care the color and other peculiarities of the skin and mucous membranes, the condition of the abdomen, and the shape and movements of the thorax; they tested the patient's temperature by placing the hand flat upon the body; and all the excretions were subjected to the closest scrutiny. By palpation they determined not only the size of the liver and spleen, but also the changes which occur in the form of these organs in disease. They used succussion both as an aid to diagnosis and as a means of favoring the breaking through of pus into the bronchial tubes. They made much of auscultation, especially of the chest, recognizing the various rales and the pleuritic friction sounds. In their description of this work it is distinctly stated that the examiner's ear is pressed tightly against the chest—a method which we of today neglect entirely too much.

I have said that anatomic study had advanced far at Alexandria. This was particularly true under Erasistratus, to whom the Ptolomies offered every facility for this work and in whose researches they were deeply interested. This eminent Greek physician laid the foundation for the study of anatomy at the school of Alexandria, and to his research work Galen must have been deeply indebted, especially as the latter did not have the advantage of human dissection. Not only did Erasistratus work upon the cadaver; criminals condemned to death were placed at his disposal, and he thus became, so far as we know, the first vivisectionist.

With such excellent opportunity for anatomic research, it seems rather strange that no further progress was made in physiology. But Erasistratus thought and Galen elaborated this: "When the thorax or chest expands, the lungs also undergo dilation, and fill themselves with air. This air, entering first by way of the trachea, ultimately reaches the anastomosing terminals of the bronchial tubes, from which locality the heart, by the act of dilation, draws it into itself, and then, immediately afterward contracting, sends it, by way of the great artery, to every part of the body." Yet, after all, no better description was given up to the time of Harvey's discovery.

A certain and considerable tendency toward specialism had developed by the time that Galen began his practice; not that many physicians devoted themselves entirely to a single branch, but very many did give special attention to a single branch, while practicing general medicine. There were the same incentives to this course then as now: increased skill in the specialty selected and increased financial returns. We hear of oculists, of course, and also of obstetricians, and gynecologists, and particularly of surgeons. Under these circumstances and these



temptations, it seems to me to be greatly to the credit of this great pioneer that he adhered to the practice of general medicine, as giving him a broader view than otherwise of his profession, and tending to develop him into the student and author which he became.

As general practitioners, then, we find him studying, reviewing, analyzing, and finally accepting or discarding the medical theories of his day. He accepted the idea of the four humors, blood, phlegm, yellow bile and black bile, and attributed all disease to derangement of one or more of these. He accepted also the benevolent or malevolent influence, upon health or disease, of the four elements, earth, air, fire and water. He knew that these elements exerted themselves mysteriously through the stars, the solstices and the equinoxes; so, in his earlier life, he was influenced by the tendency to attribute disease to occult causes. In his case, as in that of his confrères, pure speculation as to the effect of meteorologic conditions became lost in the maze of astrology. He was sure, as we have seen, that the arteries carried air, whatever else, to the tissues, and that for varying purposes, the system required two kinds of blood, one bright and thin and the other dark and thicker, though their functions were not clearly differentiated.

There is one department of physiology in which Galen did experimental work of an entirely original character, and for which he deserves unstinted praise. I refer to the experiments which he made in regard to the physiology of the brain and spinal cord. If I present one or two translations from his works you will, I think, appreciate this more clearly: "The brain itself is not sensitive; it expands and contracts synchronously with the respiratory movements, the purpose of which action is to drive the *pneuma* from the cavities of that organ into the nerves. The function of the meninges is to hold the parts firmly together, and to unite the blood-vessels. Pressure upon the brain causes stupor. An injury to the tissues surrounding the fourth ventricle, or of those which constitute the beginning of the spinal cord, produces death. The seat of the soul is in the substances of the brain, and not in its membranes. The spinal cord serves as a conductor of sensation and of motor impulses, and it also plays the part of a brain for those structures of the body which lie below the head. It gives off nerves like streamlets. Division of the spinal cord longitudinally in its median axis does not give rise to paralysis. Transverse division, on the other hand, causes symmetric paralyses. If the cord is divided between the third and fourth cervical vertebrae, respiration is arrested; and if the division is made between the cervical and thoracic portions of the spinal column, the animal breathes with the aid only of its diaphragm and of the upper muscles of the trunk. Division of the recurrent nerves produces aphonia; if the fifth cervical nerve is divided, the scapular muscles on the corresponding side will be paralyzed. The ganglia are organs reinforcing the energy of the nerves. The fact that both cerebral and spinal-cord nerve filaments enter into the composition of the sympathetic nerve explains the extraordinary sensitiveness of the abdominal organs."

When we consider that these experiments are the first of their kind of which history mentions, that they were carried out over seventeen centuries ago, and that—so far as we know—they sprang entirely from the brain of the experimenter, we may well express unlimited admiration for Cladius Galen.

As far as therapeutics is concerned—well, Galen's reputation rests solidly on other grounds; we must frankly admit that nothing more chaotic ever existed, except perhaps, some of our own prescribing. Galen's main reliance was the "Theriaca," in the compounding of which he was an expert. This composition consisted of about three-hundred ingredients—the original Warburg's tincture—among the most important of which were dried and pulverized vipers and toads, and things like that. It is interesting to note that this appetizing remedy was employed mainly as an antidote to poisons, snake bites, and what we should today call infections.

His other remedies, with few exceptions, were based upon the superstitions of the day. He was a thorough-going phlebotomist, and, from description, the original apostle of "venesection ad deliquium animi." Fifty ounces of blood withdrawn was not an unusual procedure, and among those plethoric and sensuous old Romans, the effect was very likely beneficial.

Galen's reputation stands, I should say, upon his investigations, his writings and his philosophy—these three—and I cannot say which is the greatest. We have referred to his painstaking and unrelenting thoroughness as an investigator; as an author he was even more tireless. Though there is no such record, I can conceive of no other adequate reason for his retirement to the Island of Sicily at about the age of sixty, and his remaining there until the end of his life, a decade later, than his desire to complete, so far as possible, his labors as an author. If you will recall that there were no stenographers or typewriters in ancient Rome, —no fountain pens, nothing but the stylus and the papyrus, and that, while slaves were frequently employed as amanuenses, yet it is most improbable that Galen, in view of the technical character of his subject and his language could have thus employed them, and if, against all this, you place the fact that no other physician in the world's history has been so prolific as a writer, you will better appreciate the sort of monument that this father of medicine builded himself. I doubt if you will appreciate all that means unless I tell you that there was published in Leipzig, in 1828, an edition of Galen's works in the original Greek, consisting of twenty-two volumes of a thousand pages each. This edition, however, did not claim to be complete. The list of titles collected by Daniel Le Clerc comprises two hundred subjects or treatises; yet Le Clerc doubts whether he has listed much more than half of them. The edition to which I have referred is in Greek, but Galen wrote with equal fluency in Latin, and very many of his Latin writings are preserved. It is not improbable, in fact, that more of his original writings were lost than preserved, for most of his writings were kept for safety in the Temple of Peace near the Forum; and the destruction of this building by fire, late in the second century, entailed the loss of all these valuable works.

Most medical authors, in recent years have been specialists; or if they have written more broadly upon general medicine, they have avoided the specialties. Galen covered the whole domain of medicine and surgery, adding to all that had preceded him the sum of his own investigations. A mere list of the topics upon which he wrote at length would nearly double the time that we have given to this paper; but nothing less than some, any adequate conception of his versatility and industry. Listen to these:

The Physician, An Introduction to Medicine; The Different Temperaments, 3 vols; On the Nature of Man, 2 vols; The Humors; Do the Arteries Normally Contain Blood?; On Black Bile; Dissection of the Vocal Organs; The Anatomy of the Eyes; Dissection of the Nerves!; The Physiology of Respiration; On Obesity; The Characteristics of Different Foods, 3 vols; On the Causes of Disease; *De Usu Partium Corporis Humani*, 17 vols.

This last work, Galen's principal treatise on human anatomy, constitutes a masterpiece which has challenged the admiration of physicians and philosophers in all ages.

These are a few of the medical titles. One might add:

The Parts of the Body Affected, 6 vols; The Diseases of Women; The Different Kinds of Urine; *De Pulsibus*, 16 vols; On the Treatment of Different Maladies, 17 vols.

But this most prolific writer does not hesitate to branch out into philosophy. Indeed he paves the way with his first title: On the Importance to the Physician, of a Thorough Training in Philosophy; and adds:

Commentaries on the Works of Hippocrates; The Establishment of the Art of Medicine; The Sentiments of Hippocrates and Plato.

You will see later that he did not hesitate to touch upon theology. He was much of an art critic as well. What was he not, that was worth while? Linguist, connoisseur, anatomist, physiologist, physician of wide experience, prolific author of tireless industry—I cannot see that he missed anything except the riotous and voluptuous dissipation of the day. He may have been an ascetic—but he like Horace, builded a monument more lasting than bronze. As we study his life, we can see that he set himself an herculean task—and accomplished it. "From all the widely differing schools of medicine that had flourished with more or less virility since the days of Hippocrates, he took whatever theories seemed to him to be true, and in the great alembic of his mind digested them, and distilled a theory of medicine that might well have been called the Galenical School, so filled was it with his own personality, and so persuasive was it to the loyalty of physicians of the succeeding centuries." And all of these systems and theories were analyzed, and rejected or substantiated as the result of his own unaided and independent investigations.

From all of this, combining what he found of value with what he discovered and developed of value, he constructed a veritable cyclopedia of medicine, every single title of which, viewed from the standpoint of the time in which it was written, was a classic. Not only had he no equal—he had no rival, as a medical authority. And this monument to his industry stood as a very pharos through the incursions of the barbarians, through the decline and fall of the Roman Empire, through the dark and middle ages, until Vesalius, defying the monks, took up human dissection, and paved the way for the first faint beginning of modern scientific medicine, and the torch of Galen's learning paled before the brighter dawn of the renaissance.

Consider this man, consider his materials, and resources, consider what he accomplished, and decide whether his life is not a rather caustic comment upon the indifference or the indolence of us who, with a thousand subjects of paramount



interests and importance at hand, decide that we cannot write something from our own experience to help our fellows. And yet the poorest paper that any of us could write, upon any subject in medicine, would have kept this man awake a week in awe-struck study of its mysteries.

I have referred to Galen as a theologian. That may seem a little exaggerated; but in his treatise "De usu partium" he argues for the existence of a supervising Providence, deducting from his studies of anatomy and physiology, and the adaptation of the body and its needs, proof of the presence of design in creation, thus anticipating Paley and his "Nature Theology" by fifteen centuries.

I think I can close this inadequate sketch of this remarkable man in no more fitting manner than by quoting from this treatise his "Hymn to the Diety", as it has been called, words which might well have been uttered by a Christian father, though written by the pagan, Cladius Galen.

"In writing these books, I compose a true and real hymn to that awful Being who made us all; and in my opinion, true religion consists not so much in costly sacrifices and fragrant perfumes as in a thorough conviction impressed upon our own minds, and an endeavor to produce a similar impression upon the minds of others, of His unerring wisdom, resistless power, and His all diffusive goodness. For his having arranged everything in that order and disposition which are best calculated for its preservation and continuation, and His having condescended to distribute His favors to all His works, is a manifest proof of His goodness which calls loudly for our hymns and praises. His having found the means necessary for the establishment and preservation of this beautiful order and disposition is as incontestable a proof of His wisdom as His having done whatever He pleased is of His omnipotence."

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## ARTERIOSCLEROSIS.

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By J. EDGAR HOWARD, M.D.

Haddonfield, New Jersey.

(Read at the Annual Meeting of the Camden County Society, Oct. 14, 1924)

Arteriosclerosis, chronic arteritis, or, when the smaller vessels are involved, arteriocapillary fibrosis, is a condition characterized by an increase in connective tissue formation, accompanied by degenerative changes, necrosis and calcification.

Before proceeding with the subject, it might be well to review the anatomy and superficial pathology of the arterial tube. An artery is composed of three coats: (1) The tunica intima, or inner coat, consists of endothelial cells joined together by a cement and arranged like a mosaic pavement. (2) The tunica media, composed mostly of elastic tissue with some muscle fibers. (3) The tunica adventitia, or external coat, consists of connective tissue pos-

sessing a large number of interspersed elastic fibers, together with blood-vessels, lymphatics and nerves.

In arteriosclerosis the intima is primarily affected. In early stages, a milky opacity appears in the membrane, followed by a yellowish spot which is the result of fatty degeneration. If the fat is carried away by the blood stream, there is left a superficial ulceration; but, the fatty area may become the recipient of calcareous deposits. If ulceration takes place and is not followed by calcification, the wall of the artery becomes thinned and an aneurismal dilatation is apt to result. In arteriosclerosis, connective tissue is substituted for the normal element of the vessel wall and this tissue will undergo hyperplasia and subsequent contraction and induration.

Etiology:—Cazalis claimed many years ago, that a man was only as old as his arteries, and he appears to have been many years ahead of his time in making this declaration. All races of mankind are affected by the condition, and men are more susceptible than women, in the proportion of 3 to 1. The American Indian and the African Negro are especially susceptible. Stone workers, hod carriers, farmers, day laborers, and men bearing the heavy burdens of life, on the one hand; and, on the other, men carrying heavy mental responsibilities, such as bankers, brokers, physicians, and merchants, are most often affected. Heredity plays an important part. Frequently it is observed that all the male members of a family tend to develop this condition early in life.

Improper living:—Harem, in the New York Medical Journal, 1922, states that a rich, unbalanced diet will lead to disease of the arterial system; hence the necessity for maintaining a correctly balanced diet. In the Journal of the American Medical Association, June, 1924, it is stated that excessive smoking will cause arteriosclerosis accompanied by low blood pressure; I have personally verified this statement in the examination of a small number of cases. In the same Journal, for April, 1924, the statement is made that arteriosclerosis is responsible for 70 to 90% of all deaths due to nephritis occurring after the fiftieth year of life. Focal infection, especially of tonsils and teeth, is an important etiologic factor. The use of alcohol, and hereditary and acquired syphilis have always been supposed to play an important part in the causation of arteriosclerosis.

This disease may involve the superficial or deep arteries; a few inches of either may be affected, or the whole arterial tube. The arteries of the liver, mesentery, lungs and stomach are rarely sclerosed. The aorta, with its thoracic and abdominal branches, the iliacs, and the arteries of the legs and thighs are most susceptible. At the point where a branch is given off from a main artery, a collar of atheroma may often be found.

Diagnosis:—For convenience of study, I am dividing the symptomatology into different classes. First, and by far the most important, I shall call the "early stage". At this time, there may be present no symptoms and only the history that the patient is a hard working man or a man carrying great mental responsibility, that he is over forty years of age, complains of becoming tired very easily, and suffers from chronic dizziness and insomnia. In the

"later stage", according to McConnel, the patient will have hardness of the pulse, slight edema and if the heart is much hypertrophied and but slightly dilated, dropsy will be absent for a long time and the patient may suffer very little from his condition. Due to the increased peripheral resistance, the left ventricle becomes hypertrophied and the right is involved to a lesser extent; the area of cardiac dullness is increased, with the cardiac impulse displaced downward and a little outward. There may or may not be a reduplication of first and second sounds, but the second sound is generally accentuated.

Due to involvement of the cardiac vessels, the myocardium eventually shows parenchymatous, fatty and fibrous changes. Dilation of the ventricle will follow and the patient will begin to complain of palpitation and dyspnea; the latter being greatly increased by slight exertion. During an attack, the apex beat will be heaving and pulse will be of high tension; mitral murmur will develop; the veins become enlarged; the urine becomes scanty and contains hyalin casts and albumin; dropsy now manifests itself. As the disease progresses, symptoms of dilatation become more marked and the dyspnea increases. At this time the character of the apex beat changes; it is no longer forcible but becomes diffused and develops a galloping rhythm, which in auscultation may be heard over a large area of the chest. As the cardiovascular condition is now well developed, one might think at this stage that the patient's life was about to terminate. By proper treatment, however, such a patient can be patched up and may return to light work and live comparatively comfortable for some time.

From what has already been stated it becomes apparent that diagnosis in the early stage is not always easy, but if one takes a careful history, studies his patient well and excludes other diseases, he will in most instances succeed. Then, too, one can obtain much help in difficult cases by consultation with a good ophthalmologist, since this condition often manifests itself first by the appearance of tortuous vessels in the retina. I have in times past referred patients to an eye specialist because of other conditions, and have received from him a report that the vessels of the eye showed marked sclerotic changes; with this exception the patient had presented no evidence of arteriosclerosis. In like manner, the otologist may be of great service as he may diagnose certain cases of cerebral arteriosclerosis through testing the function of the internal ear. Stein reports a study of 1026 cases in most of which vertigo was the main symptom and he was able, by repeated examinations, not only to detect the disease but to trace progress of the sclerosis of the arteries of the brain; this, he states, was done by considering the manner of onset, the course and the intensity of the phenomena presented by the ear, rather than by the symptoms themselves.

Time will not permit me to describe the many different forms this disease takes when involving the blood supply of different organs, but I would like to have you all read Dr. Drysdal's article on the prevention of apoplexy in the A. M. A. Journal, July 12, 1922.

Prophylaxis:—Since arterial hypertension is an important precursor of arterial degeneration, any course of treatment that will prevent the former,



will tend to ward off the latter. After fibrous degeneration and calcification have taken place, you are then dealing with a true condition of arteriosclerosis and, as in cardiac disease, so in arteriosclerosis, it is impossible to cure a single case. It behooves us, therefore, to look after focal infection early, to treat promptly any general diathesis and beginning kidney disease. See to it that hereditary or acquired syphilis receives the proper treatment. Advise the discontinuance of alcohol. At regular intervals, examine all men over forty who carry mental responsibilities or who perform laborious work, and instruct them as to the proper mode of living with the object of steering off arteriosclerosis as long as possible. In doubtful or obscure cases, seek the diagnostic aid of an ophthalmologist or an otologist.

After positive diagnosis is made, the patient should be instructed to keep the kidneys active by drinking plenty of water; Poland water or carbonated waters, especially. Look after the bowels and secure one or two movements daily, by means of Epsom salts if necessary. Keep the skin active by frequent bathing. Advise adequate rest for the overworked. For the mental worker, recommend horseback riding and golf for such as can afford it; walking or fishing, for the less fortunate; always avoiding fatigue; dress according to weather; exercise every precaution to prevent catching cold, and under no circumstances should there be association with those who have colds or contagious diseases.

Treatment:—Organotherapy has its advocates, and there are some statistics in support of their claims. Personally, I have had no experience with this method and have little confidence in its ever becoming practicable as, in my judgment, the administration of glandular substances cannot be expected to change established pathologic conditions. High frequency electricity has been used and great claims made for it but here again I am compelled to state that in my experience while it will cause the patient to perspire freely and will reduce blood pressure, the original condition recurs within a few days and not much good has been derived from the treatment. Moenckeberg claims that iodine will arrest progress of the disease and McConnel states that iodine and Epsom salts are the only drugs worth prescribing for general arteriosclerosis. We all know, however, the untoward effects of the iodids and that if continued for too long a period of time they cause emaciation. McConnel recommends potassium iodide as the best drug to use. I have personally obtained the best results from a combination of the iodids of iron, arsenic and mercury. Nitrites are used when hypertension is continually present to an alarming degree. Osler states that nitroglycerin is the best drug of this class but that it is almost invariably prescribed in doses that are too small. Blood-letting is advised by some but I prefer absolute rest in bed, with a liquid diet.

The points that I have especially desired to bring out are:

- (1) That hypertension is an important precursor of arteriosclerosis and any course of treatment that will prevent the former will consequently ward off the latter.

- (2) That a careful study should be made of all suspicious cases in order to make a diagnosis of the disease in its early stage.

- (3) That good authorities claim that arteriosclerosis can be arrested.
- (4) That a careful supervision should be kept over all patients who have arteriosclerosis, in order to stave off the bad effects for as long as possible.
- (5) In cases that are difficult to diagnose, seek the assistance of the ophthalmologist and otologist.
- (6) Unless there are signs of cardiac failure, the patient should be advised that there may be many years of fairly active life coming to his lot if he will but live moderately in all things.

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## MIDDLE EAR INFECTION AND ITS CLINICAL SIGNIFICANCE AS OBSERVED BY THE FAMILY PHYSICIAN.

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BY CLARENCE J. KEELER, M. D.,

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(Read, by invitation, at the Annual Meeting of the Warren County Medical Society, Belvidere, N. J., October 20, 1924.)

It affords me very great pleasure to come, upon the invitation of your chairman, Doctor Zuck, before this distinguished society of physicians to present a brief review of the subject of middle ear infection. If my presentation should seem elementary, or, if, seemingly, I repeat portions of lectures given or writings published, I beg your indulgence; for you will surely agree with me that the necessity for stressing the great dangers of middle ear infection, being of paramount importance to the well-being of our patients, shall be freely pardonable. It is the family physician who usually sees the case of middle ear infection at the onset; therefore, when in doubt, he should have, at all times, the encouraging assurance of full coöperation with the trained otologist.

Those suffering with severe earache, not infrequently, endure the pain for a day or two until the ear "breaks" and relief is given; but they should be encouraged to seek relief by surgery rather than by the use of oils, melted butter, scraped potato, core of onion, tobacco or any of those primitive methods which endanger further infection and induce complications.

Usually, the onset of middle ear infection is sudden, and is accompanied by closure of the eustachian tube. The air being excluded, the serous exudate is retained in the tympanum and this condition is evidenced by severe pain in the ears, more or less throbbing in character, with headache of marked intensity, especially on the affected side. The hearing rapidly becomes impaired and there is an associated high-pitched tinnitus. A feeling of depression prevails and there may be some elevation of temperature. Upon inspecting the ear drum, there may be observed a redness, with engorged blood-vessels, and a bulging of some portion either in front or back of the malleus. My experience has been that the upper posterior portion of the drum is the part most frequently involved. This depends,

however, upon the area of least resistance caused by retraction of the drum and adhesions within the tympanum.

Any one of the acute infectious diseases or a disease producing rapid and marked debility may result in a purulent process almost from the initial infection. Often, it is difficult to determine when an acute catarrhal inflammation ceases and when a purulent process begins, except by an intensifying of all the here-in enumerated symptoms associated with marked prostration and a history of systemic infection. In children, the symptoms are more exaggerated than in the adult. The fever may be elevated to  $102^{\circ}$  or  $105^{\circ}$ . If the child be quite young, a high-pitched cry characterizing meningeal irritation is noticed; and not infrequently, the onset is associated with convulsions. Generally speaking, infection of the middle ear, or tympanum, is the beginning of a purulent otitis with impending danger of mastoid involvement.

The tympanum is a depression within the petrous pyramid. Its inner wall is formed by the cochlea, with its oval and round windows, and crossing the inner wall is a ridge of bone known as the aqueductus fallopii through which the facial nerve passes. Its outer wall is formed below by a portion of the tympanic plate of the temporal bone; the middle portion, by the ear drum; and the upper wall by the outer plate of the squamous.

For convenience of description, the tympanum is divided into three parts: hypotympanum, mesotympanum, epitympanum. The tympanic end of the eustachian tube is in the lower part of the tympanum; thus placed, no doubt, to admit air into the tympanum and to facilitate drainage. When the tube becomes closed by inflammation, fluid accumulates in the tympanum, and rises toward the epitympanum, otherwise known as the attic. When the secretion reaches this level, it finds an outlet through the aditus ad antrum into the mastoid, which is simply a continuation of the middle ear cavity.

The usual causes of middle ear inflammation are the so-called head colds the pernicious habit of nasal douching, especially when the fluid is drawn forcibly into the nose; diseased teeth; tonsils; adenoids; oral sepsis; dentition; and, salt-water bathing. Middle ear involvement is sometimes caused, also, by attempting to clear the ears while holding the nose and forcibly inflating the middle ear; and by nasal spurs and deflections interfering with free nasal respiration, thus preventing aeration of the tympanum, and inducing venous stasis and acute sinusitis. All those conditions are prone to produce a catarrhal or purulent otitis. The middle ear infections occurring as the result of the exanthematous diseases, especially measles, scarlet fever, and influenza in the epidemic form, are invariably virulent; but diphtheria, pneumonia, typhoid fever, tuberculosis, acute and chronic nephritis, diabetes, acute and chronic sinusitis, acute follicular tonsillitis, Vincent's angina and streptococcus sore throat also produce middle ear infections of severe form. And, I have seen middle ear infection following a tonsillectomy result in necrosis of the mastoid cells.

The symptoms of middle ear infection vary from a mere sensation of fullness in the ear and a slight impairment in the acuteness of audition to intense pain, marked loss of hearing, unbearable tinnitus, high temperature and con-



vulsions. The child awakens from a sleep crying with earache. Perhaps there is vomiting, and the temperature is elevated. If he be very young, the symptoms are characterized by rolling and tossing of the head, pulling the affected ear or rubbing the side of the head involved. The sudden onset of earache of this type is induced, no doubt, by venous stasis due to a recumbent position. The lymphoid tissue becomes engorged, thereby closing the pharyngeal end of the eustachian tube and preventing tympanic aeration; if due to dentition, the inflammation subsequent thereto has, by extension, involved the eustachian tube and produced the same physiologic interference.

In an adult, the catarrhal stage is characterized by a sensation of fullness in the ear; tinnitus of more or less severity; impaired hearing; and, a dull headache on the affected side. Sometimes, however, the symptoms are quite severe.

In every case, when the herewith enumerated symptoms are observed, there should be a practice of routine examination of the ears even though ear involvement be not suspected. Always examine both ears, using a good reflected light directed into the auditory canal through an ear speculum, or use an electric otoscope. In an adult, pull the auricle upward and backward to straighten the canal; in a child, pull the auricle downward and backward. In every case of severe illness attended by great prostration, or if the patient be in an unconscious state, the ears should be examined with the same painstaking care that one would apply to the lungs or the heart, the pulse indicating, of course, the beginning of a flagging heart.

To illustrate the benefit of such examination, please permit me to cite my experience in the influenza epidemic during the World War, it being my privilege to be then attached to a Government Base Hospital. A request to examine a certain patient would be made. While passing through the Ward to the patient designated, I noticed, at times, young men unconscious, lying quietly, and others tossing in delirium; in both instances, the patients being too fearfully ill to make known to the ward surgeon or nurse the pain in their heads. An examination of the ears of those patients revealed many a case of a serious middle ear involvement which otherwise would have been overlooked. The examination must be made with the least possible disturbance to the sufferer. A myringotomy invariably secures great relief and it may be reasonably stated that many mastoid complications can be thus aborted and grave intracranial involvement averted.

If a spontaneous rupture of the ear drum with a serosanguineous discharge occurs, or should the discharge be purulent in character, the diagnosis can be readily made. Usually, however, a good light reflected into the external auditory canal makes clear the true condition of the tympanum. If seen early, the ear drum will be reddish and the blood-vessels, radiating throughout the drum, will be greatly engorged. This may occur within a comparatively few hours and bulging may be located in any of the quadrants or it may occupy the whole ear drum. This condition demands prompt relief and this can be attained by immediate incision of the drum through its bulging part.

The pathology is that the infection of the middle ear has extended from the pharyngeal vault by way of the eustachian tube; the mucosa of the tube has become inflamed, rendering it nonpatulous, occluding the air from the tympanum,



and drainage cannot take place; hence, the secretion accumulates, filling the restricted cavity. The only place where expansion can be made is in the less resistant portion of the external wall, the ear drum. Meanwhile, owing to contiguity of structure, the infection has extended into the attic and back into the mastoid. It is claimed by eminent authority that in practically 90% of the purulent cases the mastoid is involved. This does not necessarily mean the breaking down of that cellular structure. Should the pressure within the tympanic cavity become so great that spontaneous rupture occurs, it causes ragged laceration of the edges of the perforation, which become necrotic, and when the tympanum has drained there remains a permanent opening in the ear drum; should it heal, there is usually thickened cicatricial tissue which destroys the normal elasticity and the vibration of the drum is thereby lessened. In the meantime, the mucosa of the tympanum may have become necrotic at some point and as a result of this local necrosis of the mucosa, the bone thus covered tends to become necrotic. The condition then passes from an acute inflammatory process to a chronic middle ear suppuration. During the inflammatory stage, the tympanum fills with pus; the oval and round windows within the cochlea, lying in this infected pool, afford great likelihood of contamination of the internal ear or labyrinth. Such condition, affecting the function of hearing, often results in a more serious intracranial complication.

The prognosis is usually favorable if treatment is given in the early stage. Repeated attacks are detrimental to the hearing; one attack does not predispose to a second but the causative factor is likely to result in other attacks. Therefore, prompt measures for relief should be instituted. Never postpone action hoping the pain will subside when the ear drum ruptures and all danger will be averted by the discharge. That will not be true because the delicate structures within the tympanum or within the mastoid having become seriously involved—even if the power of audition be not permanently impaired—a chronic purulent process, or an acute or chronic mastoiditis, or a possible intracranial complication will result. It is a lamentable fact that many persons are handicapped by a foul-smelling discharge, with loss of hearing, vertigo, lowered mentality, head noises and other afflictions that might have been helped had the proper diagnosis been made at the right time.

Treatment may be preventive, by correction of the existing pathology. As a corrective measure, the cause, be it an infection of the adjacent organs or cavities, bad habits, or sports, anything which constitutes an etiologic factor, must be overcome.

To afford relief of the immediate infection, whether serosanguineous or purulent, the exudate should be promptly evacuated. A myringotomy is best performed under gas anesthesia, but chloroform or ether may be used. Local anesthesia, however careful the technic, is not always reliable, but is better than none.

When using local anesthesia, I have found that equal quantities of cocain, menthol and phenol, on a pledget of cotton, applied to the inflamed drum is effective. The patient should be put to bed and, to facilitate drainage, advised to lie on the affected side. In the early stages, an icebag should be placed over the mastoid; this should be discontinued after pus forms and never used for a period

longer than 36 to 48 hours because the symptoms are thereby masked. The ear should be irrigated with a warm antiseptic solution every 3 or 4 hours, judging by the amount of discharge. This is done with the view of preventing contamination from without and the backing-up of pus in the auditory canal, rather than with any dependance upon efficacy of the solution passing into the tympanum through the swollen mucosa. If the ear drum remains open, although the discharge becomes lessened, a mild astringent may be used with great benefit in restoring the mucosa to its normal condition. If the discharge persists beyond a period of 8 to 10 weeks, local necrosis within the tympanum or mastoid is very probable; in that event, a posterior drainage should be instituted to prevent the acute inflammatory condition from becoming chronic in character.

Finally, I wish to impress upon you the importance of frequent examination of the ears in all infectious diseases; of a child with the so-called digestive disturbances, especially if restlessness be attended with fever, although lack of fever in a child or adult does not preclude the presence of middle ear infection; and always make an early incision of a bulging ear drum.

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### INGUINAL HERNIA.

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BY HENRY KLAUS, M.D.

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That so many modifications of the original Bassini and Halsted operations have been advocated would seem to indicate that surgeons are far from satisfied with the results obtained by these methods. These numerous modifications would seem to point to a failure of the original methods, but such is not the case. Modifications have been introduced, and rightly so, not because of a failure of the original methods but to meet the difficulties encountered in unusual cases, especially in direct hernias, sliding hernias and the unusual cases that have been responsible for the high percentage of recurrences, and in those cases where the Bassini operation has not met the conditions pertaining to a radical cure.

These modifications of the original methods can truthfully be said to have brought the percentage of recurrences to the minimum figure, in the so-called unusual cases and in those which have heretofore been regarded by Bloodgood and others as practically inoperable. Gallie, who has made the most recent noteworthy advance in this field, reports 60 cases without a recurrence, traced from two to four years; all of which were of the difficult type in which the usual methods of hernia plastic would probably have been of no avail. If the results of Gallie's operation prove as successful in the hands of other surgeons, then his method of living fascial sutures seems certain of giving as good results in the unusual difficult oblique, direct and recurrent hernias, as the Bassini operation does in the ordinary simple oblique hernia. Gallie's is not a new method of hernia plastic but depends

upon living fascial sutures to bring the conjoined tendon and muscles into apposition to Poupart's ligament, and keep them firmly anchored there by a living nonabsorbing material, and to bridge over any small defects in the line of suture that may exist because of difficulty in approximation of muscles to Poupart's ligament when these tissues are under tension. This principle may be applied to any of the many types of hernia plastics.

The various new methods of hernia plastics embody, with few exceptions, no principle differing from those laid down by Bassini and Halsted and retain the main features of these original methods. The improvement in results has and will come, not from any radical change from the already firmly established principles but from the elimination of errors of technic and of judgment in selection of the operation best suited to the particular case. The Bassini operation properly executed will cure from 95% in adults to 99% in children, (statistics from Coley and Mayo Clinics) of the ordinary oblique hernias. It is in the large oblique hernias of long duration, in men past middle age who have worn trusses for a long time, and in direct hernias with the conjoined tendon relaxed and practically useless, that a radical cure by any method becomes difficult. Some cases, according to Bloodgood, should never be operated upon; others, after selection based upon careful examination, sound surgical judgment and execution of the proper surgical procedure, offer reasonable hope for a radical cure. Even after careful consideration of all factors, the recurrences in direct hernia reach 15% or more. The Gallie operation seems to give a fair measure of hope for obtaining radical cures in all these difficult, unusual and recurrent hernias, barring, of course, the usual surgical and often unavoidable accidents of hematoma and infection. It may be true that it is better to do any one method well than the best method imperfectly, but in order to execute a proper hernia repair in the so-called unusual types of hernia one must be familiar with the various methods and apply that method most suitable to the particular case in hand. The fact that many operators confine themselves to one method is in itself responsible for many recurrences. The Bassini operation, although it will give a radical cure in 95 to 99% of the simple oblique hernias, will fall far short of this in the great majority of direct hernias and in the unusual large oblique hernias. The fundamental principles underlying the radical cure of hernia are high ligation of the sac, adequate reinforcement of the abdominal wall, and primary union; but, in spite of attaining these, recurrences have been frequent, especially in direct hernias. In consequence of this, modifications of the original Bassini and Halsted operations have developed; among which are the Kocher, Ferguson, Andrews, Johns Hopkins, Girard, Torek, Polya, Stetten, Schley, Hogue, Downs, Pitzman, Harrison and Gallie.

The Kocher operation is nothing more than a high ligation of the sac and although it has gone entirely out of fashion it still remains one of the most instructive phases in the long history of hernia plastics, inasmuch as the percentage of cures obtained, namely 92%, show as good results as the original method of Bassini. There is no suturing of the various supporting



layers in the Kocher operation; merely a removal of the sac by invagination, and high ligation at the site of the internal abdominal ring, after making a small opening through the aponeurosis of the external oblique. What this operation proves is that a great percentage of hernias can be cured by simple high ligation of the sac without suturing of the transversalis fascia, muscles or aponeurosis of the external oblique. It is obvious that this method is of no avail in the large oblique hernias of long duration with a large defect at the site of the internal abdominal ring, nor in direct hernias or complicated hernias with adherent contents. From the statistics of cures by the Kocher method, one is puzzled as to what constitutes the essential supporting layer for prevention of recurrence; is high ligation of the sac sufficient to cure the majority of hernias of the simple type? Pitzman is of the opinion that the most important part of the original Bassini operation is the high ligation of the sac, and this is done in the Kocher method in a more refined manner. This feature has been adopted universally in all subsequent modifications and is no doubt the most essential factor in the cure of hernia of the simple type, where the internal ring is small and the fascia and muscles of the inguinal wall well developed. In direct hernias where there often is no sac present, but a general bulging through the relaxed and atrophic musculature and aponeurosis, the theory of high ligation of the sac falls far short. In this class of cases, as well as in the large oblique hernias, we must depend upon the various layers of the inguinal wall to build up a strong barrier.

There seems to be a difference of opinion as to what constitutes the supporting layers in a hernia repair. Seelig and Chouke state that recurrence is due to failure of the internal oblique and transversalis muscles and the conjoined tendon to become firmly adherent to Poupart's ligament. In all of their cases of recurrence these structures were widely separated; as though they never had been sutured. After careful experimentation on animals, they concluded that a suture of the muscle to fascia does not insure a firm, strong union. This same conclusion was arrived at from the work of Gallie and Le Mesurier, Pitzman and E. Andrews. From these experiments, it would seem useless to suture the muscles to Poupart's ligament, and that the most important part of the Bassini operation and the many modifications of this method depending upon a muscle-to-ligament, suture has no anatomic or physiologic value. They recommend, therefore, such operations as insure a strong union of the inner edge of the aponeurosis of the external oblique and Poupart's ligament, or the methods of Pitzman, Harrison, and E. Andrews, which ignore the suturing of the internal oblique and transversalis muscles and depend upon a suture of the transversalis fascia, or upon the living facial suture of Gallie. Although the above opinion is concurred in by Jean, Moschowitz, Polya, McNealy, Lusk and E. Andrews, these conclusions in face of the statistics published by Coley and Torek seem incorrect, as 95 to 99.6% of all cases are cured by the Bassini and Torek method which is a muscle-to-ligament suture. There is no doubt that in every case of recurrence there is separation between the muscles and Poupart's ligament, most commonly at the



inner angle of the ligament or at the internal abdominal ring; otherwise there never would have been a recurrence.

Those depending upon the aponeurosis of the external oblique, with its many modifications of imbrication use this method in addition to a suture of the muscular layer and the transversalis fascia as an additional strength, but none of these methods rely solely upon the fascia to form the sustaining wall. Considering the part played by the cord, in hernia plastics, the results obtained by transplantation have been better than those obtained by nontransplantation, especially in large oblique and direct hernias. It is generally admitted that nontransplantation of the cord is wrong in principle, and, admitting this, it seems that the maximum of transplantation would insure the best possible results; as is done in the original Halsted, Stetten and Schley operations.

It is of interest to note the important changes that have been made in hernia surgery since 1899 when Bassini completely revolutionized a subject which up to that time had been practically a complete failure. Although Bassini included the transversalis fascia in his muscle-to-ligament suture, this step was entirely lost track of and forgotten by surgeons during the following years, and it has only recently been again brought prominently forth by Pitzman, Harrison, and Andrews. During the early stage suture of the internal oblique and transversalis with the conjoined tendon was regarded as the essential factor in building up the inguinal wall. The second change came in 1900 when the principle of overlapping the aponeurosis of the external oblique was introduced by W. Andrews and Girard, which since has reached its height of development in such procedures as the Stetten, Schley, Polya, Halsted and Berger operations. At present there is a school which advocates discarding suture of the internal oblique and transversalis muscles to Poupart's ligament as shown by the experiments of Seeley and Chouke and the experiences of Moschowitz, Jean, Harrison, Pitzman and E. Andrews. They advocate a proper closure of the transversalis fascia only, or combined with imbrication of the aponeurosis of the external oblique, completely ignoring suture of the muscles.

There is no doubt that all three layers (transversalis fascia, transversalis and internal, and oblique muscles, and aponeurosis of the external oblique) must be carefully considered in building up a strong inguinal wall. In certain types of hernia, especially the large oblique and direct hernias, one or more of these layers will be greatly deficient and of no avail, and one must look to some other layer for a supporting wall. It is true that in the majority of cases the ordinary Bassini or Torek operation will give excellent results in which the line of support depends practically only on the muscle, but it is well to remember that an additional repair of the other supporting layers by some method utilizing every bit of tissue possible will insure a greater degree of permanent cure, especially in the unusually large oblique and direct hernias.

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## New Year's Greeting.

from

The President of the Medical Society of New Jersey.

The resignation of Dr. Mercer, unanimously elected your president at the annual meeting last June, because he felt that his impaired health made it impossible for him to fulfill the duties of the office, made it incumbent upon me through the provisions of the constitution and the by-laws, to assume the duties of the president of your society ad interim. I have appreciated to the full, the honor and responsibility which thus devolved upon me and I have tried to fulfill the duties with something of the zeal that characterized my predecessors in this position.

Our state of New Jersey, without medical schools of its own, has occupied a very interesting position in the maintenance of high standards of educational requirements for practice in the state. For this, our state medical society is thoroughly appreciated throughout the country, and its constructive efforts, so successfully carried out for the benefit of the public and the profession, have often been the subject of commendation.

Strange as it may seem, quackery in this country has increased in direct ratio with the expenditures for public education and the stringency of legislation requiring compulsory school attendance. The clientele of the quacks often comprises school teachers, not infrequently college graduates, and sometimes university professors. It was hoped that diffusion of education would bring about the diminution of quackery but it has not, so far, and manifestly will not. It remains then for the medical profession by close organization, the maintenance of high standards of ethical practice and the utilization of modern scientific diagnostic methods to secure for the public the immense benefits that will come from the elimination of quackery.

More than ever before, we need to stand shoulder to shoulder, in thorough understanding among ourselves, with a professional sense of our duty to the

public. The Medical Society of New Jersey has accomplished much in this way during the more than a hundred years of its existence and now there is the fair prospect of doing still more for this generation which needs it so much.

This is the most important task before us and I think you need only to be reminded of it to lend your heartiest coöperation to your officials and committees.

Wishing you all a prosperous year in 1925, I am,

Yours to command,

Lúcius F. Donohoe.

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### YOUR JOURNAL.

As we enter into the New Year and begin consideration of plans for future development, it seems desirable to add something to the usual New Year's Greeting. Of course, we wish you a Very Happy and Very Prosperous New Year. And equally of course, we grasp the opportunity to thank you for the assistance you have given during the past year in promoting this official organ of your State Society. But, we would in addition, take advantage of the opportunity to bring you into closer communication with the Journal and with the Officers of the Society. Through presentation of reports and letters from the latter, we hope to keep you informed regarding the work they are doing in your behalf. With reference to the periodical itself, we wish you to realize more fully that this is, really, your journal, that you have a very direct personal interest in it, and that there is a mutual obligation between you and those entrusted with its publication. You pay for its upkeep, and it should be as nearly as possible what you wish it to be. You owe it to the Journal to present the best of your scientific work to the world through its columns; to publish your papers elsewhere is to deprive your own State Medical Society of that share of your renown that belongs to it. The Journal owes you a variety of things; principally, perhaps, it is due to keep you informed concerning the development and progress of professional affairs within the State, not alone as regards scientific matters, but, rather more important, as regards changing economic and politicosocial conditions here and in the country at large, with special reference to their bearing on your local problems.

Next, we request that you read the Journal; regularly, religiously, as a duty, if you look at it that way, each month. Then, ask yourself whether it means anything to you? Does it meet your needs, as a State Journal should? If it fails in any particular, how can it be improved? If you have suggestions for its betterment, do not hesitate to present them.

We are, in this very number, experimenting with some alterations and we shall be glad to have expressions of opinions as to their effect. If you do not approve, say so; we will try to take such punishment meekly. If you approve but see a way for further improvement in the line of departure, tell us so; we shall be then encouraged to try harder to make the Journal meet all your requirements.



# Communications.

## AN IMPORTANT LETTER FROM SECRETARY MORRISON.

To the Editor of the Journal:

I have just mailed to you, to the Officers of the State Medical Society, to the members of the Welfare Committee and to the Secretaries of the Component Societies, copies of an exhaustive dissertation on the "Regulation of Physicians by Law," written by Mr. Harry Eugene Kelly, a prominent lawyer and a member of the Chicago Bar.

I urge the careful reading and earnest study of this masterly essay by every physician in the profession. The author states in the preface that:—"This essay is not a special plea or a partisan brief in professional support of a client's position. Neither is it an exhaustive treatise on the law or the medicine of its subject matter. It is an argumentative statement of the situation respecting legislative regulation of the occupation of treating diseases and injuries, and physical and mental abnormalities of human beings, as I see it after studying it more than twenty years.

My object is to explain the legal substance of such regulation to physicians, the medical substance of it to lawyers, and both to laymen, and to acquaint all public officers with its general character and purpose.

All the way through this article the author refers to physicians and healers as persons engaged in the healing art, irrespective of their schools of medicine or therapy. He shows the necessity, recognized again and again by the Courts, of the need of doctors with high moral character, and the highest knowledge attainable in the anatomy and physiology of the human body, with a thorough knowledge of all other subjects which will assist the doctor in arriving at a correct diagnosis. "No person can safely practice the healing art, even in the most limited field, until he is familiar with the signs and symptoms of all diseases. He cannot acquire this familiarity without a study of all the branches of scientific knowledge relating to the human body in health and disease."

Perhaps the most masterly part of this argument is a keen analysis of the opposition on the part of the cults to reasonable scholastic and medical standards for all who would treat the sick. He shows up their stock arguments, accuses them of seeking a monopoly, and of attempting to make the requirements for regular physicians higher, while they seek legislation which would permit them to practice medicine on qualifications which would eventually lower all standards to a level of their own deficiencies.

Mr. Kelly goes on to show that existing statutes are erroneously framed on a theory that tends to perpetuate present cults and will indefinitely create new ones. In a strong plea for the recognition of the rights of the State in the treatment of the individual, he urges a uniform one-standard law, with one examining and licensing board, and he condemns all "Limited Practice Acts."

The Medical Society of New Jersey has reason to be congratulated for being one of the first State Medical Associations to secure legislation along these broad lines. Our law is far

from being an ideal one, especially in regard to "limited licenses" and as to penalties. Our Welfare Committee is working along these lines now, and we are in hopes that the law may be made more stringent.

The entire argument in Mr. Kelly's excellent article may be summed up in these words:—that the public, the members of our legislature, the members of the Bar, and the physicians in America should be educated up to the point where they will see the necessity for accepting this broad interpretation of the education, license and control of all persons engaged in the healing art, on a basis of absolute equality, and that this supervision must be exercised by the state through a single standard and by a single board, without recognizing any school of medicine or any cult, and that all healers must be accepted or eliminated on the standard.

J. B. Morrison,  
Secretary.

## A TRAVEL LETTER FROM DR. EAGLETON.

Crossing the continent of Australia, I had the privilege of seeing a great deal of medical work and found the hospitals to be of high class and the surgical work the equal of that anywhere else in the world. The Australians protect the term "Doctor" so that, although there are a large number of persons practicing medicine without having obtained proper education, they are afraid to advertise themselves as doctors. A whiff of the irregular methods of the United States was evinced while we were in Adelaide, where a woman advertised in the paper under the heading "The Workers' Friend, Nature's Methods are the Best," and gave her name, followed by "N. D., Iowa, U. S. A., Doctor of Naturopathy." She, however, does not dare to call herself "doctor," though people of Australia are lead to believe that the state of Iowa conferred this degree upon her. It is undoubtedly one of those degrees obtained from colleges not recognized in the U. S. Naturopaths and Chiropractors are beginning to appear in Australia, but on account of severity of the laws none of them dares to use the title "doctor." While we were in Australia the opticians were trying to have a bill passed to prevent the sale of glasses except to those qualified to refract. The opticians call themselves "opticians"; not Eye Doctors, nor Eye Specialists. One of the prominent advertisements read as follows: "Mr. B., the optician means Mr. B., F. I. O. O., F. S. M. C., D. B. O. A., by Exam., London." "Mr. B., Freeman of the City of London." "Mr. B., highest qualifications in the State." You will note that he never dares to call himself "doctor" although he has all kinds of irregular diplomas, nor does he dare to call himself an eye specialist as is done in New Jersey. Furthermore, pharmacists, or chemists as they are called in English countries, do not dispense drugs. If one buys a box of quinin tablets, the label does not prescribe 1 to 3 per day, as is usual with us, but says—"Dose one or as many more as ordered by the physician." The whole effort is to induce people to consult physicians and not to buy drugs without a physician's advice.

In Australia, a doctor has really to serve eight years in medicine before he can obtain a license to practice. Preliminary educational



requirements are not as high as with us. The desire being to have the candidate spend more time in college and hospital studying medicine rather than in school studying Latin or Greek. The entire country is undergoing a campaign for the suppression of venereal diseases. One authority in Melbourne had stated that 80% of the males of that city are affected. Of course, I cannot believe that such a large proportion of the population is infected, but that the condition is very serious there can be no doubt, and I feel certain that during the next few years Australia will adopt a Marriage Certificate Law such as we introduced into the New Jersey Assembly last year.

I have been surprised at the prominent part physicians have played in the exploration and development of the Australian Continent. In Tasmania, a Dr. Scott was the original explorer. The most prominent man in the Government at Melbourne, is Dr. Page, the leader of the Coalition Government. There are two physicians in the National Assembly and several in each of the separate Parliaments of the different States of Australia. While at Perth, I was taken around by a physician, who fifteen years before had been told in London that he had tuberculosis and must seek a warmer climate or he could not possibly live. In Western Australia the climate is simply wonderful; semitropical, and a man can work throughout the year without difficulty. Very little of the Western Australian territory has been explored, but its mineral wealth is supposed to be great and its soil, which looks like sand, will grow two crops a year under irrigation without fertilization.

All through Australia, labor is in command and is rather "slopping over," for although there are really two jobs for every man there is still some unemployment because the men will not leave the cities and labor leaders are preaching the pernicious doctrine that as wealth has been created by labor it should be possessed by labor. Of course the effect of this is that large numbers of men are willing to work only a few hours each week, for instance in the coal mines, and they have gone so far as to support what they call "Annoyance Strikes," simply to keep the employer annoyed.

The voyage from Perth to Colombo, chief city of the Island of Ceylon, requires 10 days. Colombo is considered by many people to be one of the most beautiful spots on earth; certainly it is well situated, and it has a beautiful harbor which ranks as the sixth largest of the world as regards the amount of shipping passing through. Kandl, about 75 miles from Colombo, was for a long time the seat of government for Ceylon, and the Kandy Kings are still very powerful. While there, I saw a number of recently captured elephants being trained to work and the process of training was rather interesting; the elephant was tied by the leg to a large tree and a tamed elephant, placed in the vicinity, gradually instructed the new one what he was expected to do. However, the chief work of these elephants is to be ridden on state occasions to display royalty or wealth.

The chief industry of the people is the growing of rice and cocoanuts and it is interesting to learn that in the cultivation of rice the Ceylonese have been using artificial irrigation for more than 2000 years.

The religion of the country, the Buddhist faith, adopted about 250 years before Christ, is extremely interesting; it is against all castes and its chief object is the living of a good existence here, so that after death the believer will become one with the Infinite. Their priests are not allowed to hold property and are supported by begging for alms. I visited one of their libraries in which there were many books 800 years old, written on palm leaf and well preserved. The writing was done in a peculiar way; a piece of steel, sharpened at one end, is held firmly against a finger nail of the left hand and a deep groove made in the nail; into this groove is then rubbed India Ink and any excess wiped away with a cloth. Now when you think that the writing done in this way has continued to be legible for more than 800 years and that much of our writing and printing of the present day will fade away in less than half that time, it does not seem that we have improved in that art as much as we would like to believe.

Wells P. Eagleton.

#### FROM THE STATE BOARD OF MEDICAL EXAMINERS.

To the Editor of the Journal: You will find enclosed questions used at the October examination of the Board for all classes. The Osteopathic candidates are examined in the same subjects as the medical candidates with the exception of *Materia Medica*, and in place of this subject they are examined in osteopathy. The chiropractic candidates were some of those that qualified for examination under the 1923 amendment and the subjects for the examination are specified in that act. We had one osteopathic candidate and he passed; 22 medical candidates, 4 failed and 1 was expelled; 12 chiropractic candidates, 9 failed; 2 chiropody candidates, both passed; 11 midwifery candidates and all passed.

At a meeting of the Board on December 4, a motion was passed directing me to suggest to you that an article be printed in the Journal advising physicians how to proceed in cases where persons are practicing medicine and surgery or any branch thereof without a license.

We have found that a great many physicians know of persons practicing illegally but never report them; first, because they do not know, to whom to make a complaint; second, because they do not want to be involved in any legal proceedings. When a complaint is received by the Secretary of this Board, to whom all complaints or information regarding illegal practitioners should be sent, the secretary has the complaint investigated and if he finds that the person alleged to be practicing is practicing he secures evidence and prepares the case for prosecution. The complaint is signed by the secretary of the Board and the person sending the information is never called to testify and is not known in the case. The Board will immediately investigate any complaint sent to them and believes that the licensed physicians, osteopaths and chiropractors should assist by reporting the illegal practitioners in their vicinity.

Sincerely yours,

Alexander Macalister,

Secretary.

### Report of Convictions for Illegal Practice.

Secured by State Board of Medical Examiners during the past year.

Convicted of the practice of medicine under the law of 1893 as amended in 1915 and 1921. (The practice of medicine is herein defined to be the practice of any healing art.)

Defendant	Residence	Offense	Penalty	Jail sentence (**)
Succorso Scallone, Irvington...	2nd	\$500.	(Pd.)	
Anthony DeVito, Newark...	2nd	500.	"	200 days
Carl H. Vail, Ocean City...	2nd	500.	"	"
*Herbert Atkins, Westwood...	1st	200.	"	"
Alfred E. Smith, Newark...	1st	200.	"	"
*Roy S. Enyart, Newark...	2nd	500.	"	"
*Jacob Silverman, Jersey City...	1st	200.	"	"
*John H. Conover, W. N. Y...	2nd	500.	"	50 days
*Meade H. Whiteside, Trenton...	2nd	500.	"	30 "
Lynn W. Frye, Bordent'wn...	2nd	500.	"	30 "
*Louis Nalitt, Bayonne...	1st	200.	"	"
Cornelius Young, Paterson...	1st	200.	"	"
*Fred H. Knierim, W. N. Y...	1st	200.	"	50 "
Jos. Tuległowicz, Newark...	1st	200.	"	"
*William H. Sharp, P'nsgrrove...	1st	200.	"	"
Jaques Gordon, Atl. City...	1st	200.	"	"
James F. Kerr, Newark...	2nd	500.	"	38 "
*Clinton D. Dugan, Hoboken...	1st	200.	"	100 "
Robert Bieri, Hoboken...	1st	200.	"	"
Salvatore Caridi, Hoboken...	1st	200.	"	"
Giuseppe Gorga, Hoboken...	1st	200.	"	"
*E. J. Herman, Palmyra...	1st	200.	"	"
L. J. Weiner, Red Bank...	1st	200.	"	"
*R. H. Langley, Bound Brook...	2nd	500.	"	200 "
Boorman F. Jones, Newark...	1st	200.	"	"
Ernest Huebner, Hoboken...	1st	200.	"	"

Midwives convicted of practicing midwifery without a license.

Mary Balasz, South River...	2nd	\$500.	(Pd.)	
Angelina Iannacone, W'field...	1st	200.	"	
Constance Chrzanowski, L'den...	1st	200.	"	
Gelsomina Ontea, Jersey City...	1st	200.	"	
Mary Grande, Bernardsville...	1st	200.	"	
Szofia Terpai, Terpai...	1st	200.	"	
Ella Storey, Camden...	1st	200.	"	10 days
Feliska Wronski, Harrison...	1st	200.	"	
Crestina Tolomea, F'st Groves...	1st	200.	"	

\*Chiropractors.

(\*\*)Defendant refused to pay the penalty prescribed by law—hence the jail sentence.

## Observations from the Lighthouse

Abandoning the old practice of presenting scattered abstracts upon a variety of unrelated subjects, we propose to try the experiment of establishing here a column comparable in some degree to the weekly review of general topics in the Literary Digest, a column in which we may present sketchy references to some of the most important scientific medical developments of the preceding month as reported through original articles in leading medical periodicals. We shall be able to deal with but a few topics each month, and shall not attempt to discourse extensively upon any subject; the object will be, rather, to stimulate interest in what might be called a system of postgraduate reading. Subjects selected for consideration will be of a practical nature and, in so far as possible, of general interest, and the references given will be intended to lead the reader to investigate further on his own account. If any reader should find himself sufficiently interested in any subject discussed to desire further information, we shall be very glad to try to furnish an enlarged bibliography upon that question, and, if he wishes to procure abstracts of the original articles quoted, or access to the complete

original, we can put him in the way of securing that material promptly and at the minimum of labor and expense.

### Surgical Treatment of Angina Pectoris.

In the report of proceedings of the Hunterdon County Society, published in this issue of the Journal, Dr. Salmon relates an experience with the recently proposed operation of sympathectomy for relief of angina pectoris. Very few of these operations have been performed and the reading of this case history led us to inquire concerning the present state of knowledge on this question. Charles G. and A. F. Jennings (*Med. Jour. & Rec.*, 120:311, Oct. 1, 1924), report a successful case, in which resection of 3 inches of the cervical sympathetic gave relief from attacks for 2 months, and the patient is still under observation; during the first 2 weeks the patient complained on 3 occasions of all the symptoms of angina except the pain. As there has been no recurrence since, the authors feel encouraged to believe that this operation offers, in selected cases, a fair prospect of relief from the terrible pain of the disease and, perhaps, a chance of permanent cure.

Considering the pathology of angina pectoris, Daniélopou, (*Brit. Med. Jour.*, p. 553, Sept. 27, 1924), suggests that the starting point is in the myocardium of the left side and that the process is analagous to that of fatigue of voluntary muscle. The attack arises from disturbance of balance between the work of the myocardium and its blood supply through the coronary arteries; there then develops an actual poisoning of the myocardium and toxic substances accumulate and irritate the sensory fibers; while the irritation is feeble, no pain results but reflexes along the pressor and depressor nerve fibers tend to intensify the poisoning by increasing the heart action, thus constituting a vicious circle. He finds in this an argument in favor of cutting some of these nerves. On the other hand, Sir James Mackenzie, (*London Lancet*, 207:695, Oct. 4, 1924) recognizing the fact that the operation is not expected to cure, but merely to relieve pain, warns against its performance: "In dividing the afferent nerve, the surgeon cuts a structure whose function is unknown beyond the fact that it conveys impulses from the heart to the central nervous system for a condition that is still the subject of speculation. A sign given out by muscle when exhausted, and particularly when forced to work with a defective blood supply, is pain. Patients realizing the significance of the pain of angina may, by taking heed, lead lives free from distress for many years. Inasmuch as the amount of work the damaged heart can perform is limited, and the indications for treatment are to save the heart muscle from overexertion, the removal of this danger signal is, in the present state of our knowledge, extremely hazardous and therefore bad practice."

Going somewhat to the other extreme, Flörken (*Arch. f. klin. Chirurgie*, Berlin, 130:68, Aug. 7, 1924), presents the histories of 27 cases operated upon; 3 of them by himself. The operations performed in this series varied considerably, and he discusses their relative value. Apparently, resection of the cervical sympathetic or bilateral resection of



the depressor gave the most satisfactory results; for patients with pains radiating into the arm, operation on the sympathetic is preferred. He believes that the operative treatment of angina pectoris should be considered only after all internal remedies have failed, since the surgical mortality is 20%.

#### Appendicitis in Children.

Quite a lively interest has been evinced recently in this subject. A symposium appeared in the *Journal American Medical Association* for Sept. 27, in which the disease was discussed from nearly every angle. Howland called attention to a feature that has seldom been referred to; namely, the part played by intestinal parasites. The high incidence of presence of worms in appendixes removed because of catarrhal changes seems to be strong evidence of their having been the cause of the inflammation. He considers the diagnostic pitfalls numerous when appendicitis occurs in a child under 5 years of age, but says that the first and all important sign is pain; that pain is regularly present in these cases though the child not infrequently denies it through fear. Bolling reported upon 123 cases of appendicitis occurring in children ranging in age from 1 to 15 years. He believes that in children this is always a surgical affection; that the risk of an exploratory operation is much less than that of a ruptured appendix; and, he strongly urges that no child should be given a cathartic for relief of abdominal pain until the possibility of appendicitis has been excluded. Mixter presented the records of 100 cases of chronic appendicitis occurring in children under 13 years of age, and this included no case in which the chronicity of the affection had not been thoroughly established; the average duration of symptoms in this series was 16 months. He, too, found pain the predominant symptom, and generally it was located at McBurney's point.

By way of comparison, it is interesting to read a report on 120 cases of acute appendicitis by W. A. Thomson, of London, (*Brit. Jour. Child. Dis.*, 21:207, July-Sept., 1924). As might be expected, his observations and experiences coincide with those of his American confrères. Pain was the characteristic symptom, usually umbilical, but sometimes diffused throughout the abdomen at first; generally vomiting had been present, appearing just after the onset of pain. Abdominal rigidity in a child, he believes, usually means abscess formation, and he calls particular attention to the danger in those cases where the pain and tenderness diminish and the temperature suddenly drops to normal or subnormal; this too often means that the appendix has ruptured.

Altogether, these papers leave the impression that in the first years of life appendicitis is the most common of the possible acute emergencies.

#### Endocrinology.

Endocrine therapy continues to attract considerable attention but, save for the reports of progress in the clinical use of Insulin, little of practical value has been published recently. Referring to the application of endocrine therapy to pediatrics, Howland (*Southern Med. Jour.*, 17:743, Oct., 1924), reviews the subject very thoroughly and concludes that

efforts in that direction have been generally unsatisfactory. Polyglandular therapy has come into vogue on the supposition that not infrequently there is a disordered activity of several glands, a failure of coördination among them, but a real scientific basis for this form of therapy is difficult to find. "The old shotgun prescriptions of the past are re-incarnated in the organ preparations of today. The most irrational mixtures are utilized for the most intangible ailments. Particularly to be deplored are the glibet sauce mixtures designed to influence favorably mental deficiency, mongolism, epilepsy and other distressing nervous and mental conditions. In the majority of instances these conditions depend upon definite pathologic changes due to maldevelopment, inflammation or injury, and cannot be controlled by giving a mixture of gland extract with, perhaps, a dash of brain substance thrown in." This is a wise warning against some of the gland propaganda of the day.

#### Thermopenetration.

Diathermy, or the application of electric currents of low tension and high amperage to produce heat in the deeper structures of the body, continues its wonderful progress in the clinical field. There seems no end to the marvelous reputed accomplishments of this method of treatment. Each month brings forth a new crop of reports as to its successful applicability in new directions, and one is inclined to think that we shall ultimately be able to treat all diseases by this "new and bloodless surgery." Fouts (*Jour. Radiology*, 5:272, Aug., 1924), tells of its great value in the treatment of bruises about joints and in sprains and fractures; if applied immediately after injury and before edema and swelling have occurred, it relieves muscle spasm and pain, and prevents edema. Judd, in the same journal, speaks enthusiastically of its use in a variety of conditions, including such joint affections as mentioned above, a case of enteroptosis with valvular heart disease, and one with all the indications of a lobar pneumonia. H. E. Stewart, (*Internat. Clinics*, 3:65, Sept. 1924), reports a series of 36 cases of pneumonia treated personally by diathermy with an average mortality of 19.4%, and, another series of 120 cases, which includes with his own work the cases collected among his colleagues, some 50 different clinicians, with a mortality of only 14%. He states that the treatment is comparatively simple, is followed by no untoward action, does not have to be delayed for any laboratory tests, and is applicable to all types of lobar pneumonia.

Reijnders, (*Nederl. Tijdschr. v. Geneesk.*, Haarlem, 68:1600, Sept. 27, 1924), under the head of "new applications of diathermy," tells of experience with it in chronic rheumatic arthritis, in sciatic neuralgia, and is especially pleased with his results in the treatment of both acute and chronic gonorrheal urethritis; perfect cure was obtained in 8 cases of the acute type, the shortest period of application being 70 minutes and the longest 6 hours, the latter comprising 4 sittings of 90 minutes each. Of 3 cases of epididymitis, 2 were cured in treatment periods of one-half to 1 hour; the third proved wholly resistant. Carlo Vitanza, (*Riv. d'ostet. e ginec. prat.*, Palermo, 6:407, Aug., 1924), has had

exceedingly good results with diathermy in the realm of gynecology; employing it in amenorrhea and dysmenorrhea as well as in many inflammatory conditions. Dan M'Kenzie says (Jour. Laryngol. & Otol., Edinburgh, 39:545, October, 1924), that after 10 years' experience with diathermy (the method was used in England and Scotland long before it came into vogue here) in the treatment of cancerous growths of the pharynx and larynx, he finds it a remedy of unequaled value because there is no other applicable alike to eradicable and noneradicable cancers. And, speaking of cancer of the tongue and pharynx, Norman Patterson (Arch. d'electric. med. etc., Bordeaux, 32:284, September, 1924), declares that the results of diathermocoagulation are vastly superior to those of surgery; he reports 13 cases cured, and with no recurrences during a period of observation ranging, in different cases, from 18 months to 8 years.

There can be no gainsaying the fact that diathermy has produced remarkable results in many different fields and that it deserves the active interest and most careful study of every practitioner.

#### Urology.

A startling contribution to urologic therapeutics has just appeared from the Bacteriologic Department of the School of Hygiene and Public Health of the Johns Hopkins University, wherein Veador Leonard reports (Jour. Urol., 12:585, December, 1924), his experimental work with a new drug for use as an urinary antiseptic. This drug, Hexyl Resorcinol, is the most powerful germicide ever described as a nontoxic substance; it exhibits an increase in bactericidal power over resorcinol, its mother substance, of more than 15,000%, and over phenol of more than 4000%. It is nontoxic when taken by mouth and may be given in repeated doses over indefinite periods of time. Prolonged administration results in no injury to the kidneys nor irritation of the urinary tract. It seems to exert little, if any, influence on infections that have invaded the parenchyma of the kidney, but it is the most powerful internal urinary antiseptic yet discovered. In fact, it is not only a urinary antiseptic, but it renders the secreted urine bactericidal. Urinary infections due to the usual Gram-positive cocci ordinarily clear up promptly, completely and permanently with no other treatment than hexyl resorcinol by mouth. Similar infections due to *Bacillus coli*, and confined to the urinary mucosa from the kidney pelvis downward, can be disposed of completely with no other treatment than the internal administration of this drug. On doses of 0.3 to 0.6 gm. three times a day, chronic infections of the urinary tract due to staphylococci and to streptococci cleared up promptly and decisively.

#### Patient.

A ducky called at a hospital the other day and said: "I come to see how mah friend Joe Johnson am getting along."

"Why, he's getting along fine!" the nurse answered. "He's convalescing now."

"Well," said the ducky, "I'll jest set down and wait till he's through."

—Everybody's Magazine.

## County Society Reports

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The regular monthly meeting of the Atlantic County Medical Society was held at the Hotel Chalfonte, Friday, Dec. 12, 1924. Owing to the illness of the President, Dr. Clarence J. Andrews, the meeting was called to order by Dr. Samuel Stern, Vice-President. The minutes of the previous meeting were read and approved. The report of the Committee on Public Health and Sanitation, told of the failure to prevent rescinding of the "Dog Vaccination Bill" (to control rabies) and stated that, despite the vigorous protest made by Dr. Barbash at the public hearing at the City Hall, the ordinance was rescinded. Dr. Stewart reported that he had engaged in several conferences with officers of the Atlantic County Drug Association, offering full coöperation of the Medical Society with that organization, and that he believes a concrete program will soon be formulated looking to the elimination of persons improperly posing as pharmacists.

The Board of Censors reported approval of the transfer of membership for Dr. Louis A. Podolski from the Philadelphia County Medical Society to the Atlantic County Society.

The scientific program opened with a paper by Dr. Nellis B. Foster, on "The Recognition of Early Renal Disease." Reviewing the difficulties in the way of diagnosing early changes in the kidneys and showing that reliance could not be placed on simple tests of albumin and specific gravity, Dr. Foster demonstrated the value of the renal efficiency test devised by himself, and emphasized the necessity for coöperation with one's colleagues in making a complete physical examination; for instance, the importance of securing an ophthalmoscopic examination, complete urinalysis, blood pressure measurements, and the phenolsulphonephthalein test. Then the functional test is made by withholding all fluids for 24 hours and at the end of that period giving 1500 c.c. of water and measuring the amount of water secreted during the succeeding 4 hours; the output should be approximately 1000 c.c., and any falling short of that indicates impairment of kidney function.

The second paper was by Dr. Oswald Swinney Lowsley, entitled "Some New Phases of Urologic Surgery." A number of new instruments and drugs, some of them of foreign origin, were exhibited, and the paper was illustrated by lantern slides and moving pictures. Discussion of these papers was participated in by Drs. Stewart, Scanlan, Westney, Reik, Stern, Shivers and Brown.

### Program for the January Meeting of Atlantic County Society.

The next meeting will be held at the Chalfonte Hotel, Friday, Jan. 9, 1925. Dr. George P. Muller, Associate Professor of Surgery, University of Pennsylvania, will speak upon the "Diagnosis of Gall-Bladder Disease," and, Dr. William Sharpe, of the Brady Neurologic Institute, will have for his topic "Recent Advances in Neurosurgery," with particular reference to "Diagnosis and Treatment of Brain Injuries." All members of the medical profession are in-



vited to attend the meetings, and as many New Jersey physicians are accustomed to spend short vacation periods in Atlantic City, it is hoped they will avail themselves of the opportunities to hear the excellent lectures being provided by this society.

#### Report of Atlantic City Hospital Staff.

D. W. Scanlan, M.D., Reporter.

The regular meeting of the Staff was held Friday, Nov. 21, at the Breakers. Dr. Marcus, Pediatrician to the hospital, presented a case of Spina Bifida and one of Encephalocele, the latter patient having been operated upon successfully. The importance of looking after the diet of pregnant women was discussed, with special reference to the need for foods rich in calcium and phosphorus, and both case reports were accompanied by discourses on the etiology and treatment of the conditions.

Dr. Ireland reported on the work of the Obstetrical Department, and Dr. Homer Silvers for the Surgical Service. During the 3 months just passed, 115 patients were admitted, and there were 11 deaths, 3 of which were post-operative. Deaths occurred in the following conditions: Burns, 4; Crushed Chest and Ruptured Spleen, 1; Occlusion of Hepatic Duct with Nephritis, 1; Facial cellulitis with septicemia, 1; Ruptured ilium, 1; Prostatic hypertrophy, 1; Infected finger, terminal pneumonia, 1; 3 patients were discharged unimproved (1 of tuberculous enteritis with pyloric obstruction, 1 of cancer of the bladder and 1 pyloric adhesions).

#### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Bergen County Medical Society was held at the Hackensack Hospital, Tuesday, Dec. 2, 1924. The President, Dr. Trossbach, was in the chair.

Dr. Armstrong offered the following series of resolutions, which were discussed and unanimously adopted:

WHEREAS, contrary to the best interests of good morals among the people and the tenets of any religion held by civilized peoples and without due process of law, it has formerly been the custom in Bergen County to confine persons suspected of being insane in the County Jail, pending their examination.

BE IT RESOLVED that it is the opinion of the Bergen County Medical Society, that the Board of Freeholders should make arrangements with the Hackensack Hospital or the Englewood Hospital, or both of them, for the accommodation of patients, under observation, for such period of time as is thought necessary by the County Physician. Furthermore,

BE IT RESOLVED that the expense of such accommodation should be borne by the county at large, and not by private charity.

Dr. Gabriel Tucker presented an excellent paper on "Esophageal Strictures and Their Treatment with the Retrograde Bougie," and a second paper, equally interesting, entitled "Foreign Bodies in the Respiratory and Intestinal Tracts," illustrating both papers by moving pictures. Dr. C. M. Lukens read a paper on "Lung Abscesses," making his pre-

sentation unusually clear and instructive by the aid of moving pictures and slides showing the technic of treatment.

A resolution was passed asking members of Congress to support the movement to have all containers of household lye labelled as "poison."

#### CAMDEN COUNTY.

Horace L. Rose, M.D., Reporter.

The regular meeting of the Camden County Medical Society was held on Dec. 9, at 3 P. M., at the Camden City Dispensary, Dr. Charles H. Jennings, presiding. Dr. I. W. Knight of the State Board of Health, read a paper on "The Schick Test," and spoke at length on the toxin-antitoxin treatment for Prevention of Diphtheria."

Dr. J. C. Lovett, Medical Director of Camden Municipal Hospital, read a paper on the "Dick Test for Scarlet Fever."

Dr. Stone, Director of Health of Camden, spoke on the "Recent Small-pox Epidemic."

Dr. E. B. Rogers, as chairman of the committee to meet with the Camden City Medical Society committee to consider the advisability of amalgamation of the two societies, reported adversely. Dr. H. L. Rose, in presenting a minority report, asked the chair to appoint a committee to consider the advisability of holding 6 county meetings a year instead of 4, the additional 2 to be purely scientific. The committee was appointed.

Nine new members were elected to membership: Drs. George M. Adams, of Gloucester; Claude B. Phillips, of Collingswood; H. Wesley Jack, Collingswood; George B. German, Camden; Ernest Walton Clark, Camden; Robert L. Sheppard, Camden; Alexander Ellis, Camden; K. B. Barb, Camden; Lawrence Litchfield Glover, Camden.

Dr. Dorothy Bacher, of New York, head of the Birth Control Clinic, will address the society, on that subject, at some future date.

#### Camden City Medical Society.

The regular monthly meeting of the Camden City Medical Society was held at the Camden City Dispensary, December 2, at 9.00 P. M. In the absence of the President, Dr. Thomas K. Lewis presided.

The program was furnished by the pediatricians of the society. Dr. S. E. Stokes spoke on the coöperation of the mother and the physician; Dr. Vincent Del Duca on preventive pediatrics; and, Dr. E. G. Hummell on infant-feeding. The papers were well received. The discussion was opened by Dr. Mahaffey, continued by Drs. Underwood, Lippincott, Rogers and Palm, and closed by Dr. Hummell. Dr. Palm commented on the fact that a paper on infant feeding did not mention certain widely advertised infant foods.

The committee appointed to meet the committee from the county society to consider coalition of the two societies reported that they found no cause for such action.

Drs. Loeling of Merchantville and Fox of Gloucester made application for membership in the society. Drs. Schrack and Ruttenberg were elected.

A committee was appointed to purchase a suitable table and light for the speakers.

# ESSEX COUNTY.

Alfred Stahl, M.D., F.A.C.S., Reporter.

The regular monthly meeting of the Essex County Medical Society was held Thursday evening, December 11, 1924, at the Academy of Medicine at Newark. Dr. James Ewing, Professor of Pathology at Cornell University Medical College, delivered an address on Cancer, explaining that he does not believe it to be of parasitic origin but due to chronic irritation, whether that be chemical, mechanical or thermal in character. Such chemical irritants as tar and arsenic have been experimentally employed to produce cancer and metastases therefrom. Until the death rate from cancer shows a marked decrease, it cannot be said that the medical profession is solving the cancer problem. Upon the premises that chronic irritation is the chief etiologic factor, the prevention of such irritation and the early recognition and prompt treatment of precancerous lesions is our most important duty. Periodic health examinations will go a long ways toward solving the problem of early detection. Dr. Ewing believes that radium is the best therapeutic agent that we now have with which to combat cancer. Failure on the part of the radiologist is largely due to inexperience and to inadequate equipment. He is not optimistic as yet about deep x-ray therapy.

# Eye, Ear, Nose and Throat Society.

The regular monthly meeting of the Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey was held Monday evening, December 8, 1924. Dr. Ross Hall Skillern, Professor of Laryngology, Post-Graduate Medical School of Philadelphia, presented a paper on the "Embryology, Anatomy, Physiology and Surgery of the Maxillary Sinus." The air pressure of nasal respiration during infancy and childhood is perhaps the most important factor in the formation and development of the nasal accessory sinuses. Dr. Skillern described a series of experiments performed upon a litter of 6 puppies; 2 had their nostrils completely occluded; 2 had one nostril each occluded; and 2 were held as controls. The puppies with both nostrils occluded, failed to develop a sinus on the closed side; those with one nostril occluded failed to develop any sinus on the closed side; the controls developed normally. These experiments emphasize the importance of correcting defective nasal breathing in early life; such defects as obstructive adenoids, tonsils and deviated septums. Concerning the treatment of sinus disease, especially that of the maxillary sinus, the speaker described the Caldwell-Luc and the Denker operations as the methods of choice where radical intervention is indicated.

# HUDSON COUNTY.

Wm. Freile, M.D., F.A.C.S., Reporter.

The Hudson County Medical Society gathered at the Jersey City Hospital on Tuesday evening, December 2, 1924, at 8.30 P. M., Dr. Luippold presiding. Usual routine business was transacted. The Welfare Committee reported that they had been to Trenton, but no definite action worth reporting had been taken.

Mr. F. N. Standbridge, representing the A. M. A., had made a canvass of the county and, as a result, the following names were proposed for membership: Drs. S. Ben Ascher, Jersey City; Myron Sheppard, M. H. Miller and Dominick Velole, West New York; Dan Donohue, Fairview Ave., Jersey City; D. R. Atwell, Hoboken; George Good, Union Hill; Arthur O. Largy, Bayonne; A. Ockens, West Hoboken; Maurice Frank, Ben Lipschitz and Jos. Luberman, Bayonne; Jacob Femberg, Dr. Doran, Dr. Sullivan (Baldwin Avenue), Jersey City; Walter R. Renik, Arlington. Herman Feit, having been passed on by the censors, was duly elected to membership.

Anent the annual dinner to be held sometime in January, 1924, Dr. Jos. Londrigan, Hoboken, was appointed chairman, with Drs. Woodruff, Perlberg and Spaulding on the committee.

Dr. Luippold said that in compliance with the request of State Chairman, Dr. Ill, this night would be devoted to "Cancer." He then introduced George Semken, M.D., of New York City, Surgeon-in-Chief of the New York Skin and Cancer Hospital and member of the Executive Committee of the Society for the Control of Cancer. Dr. Semken gave a most interesting talk (with lantern slides) covering every phase of the subject. We hope to publish a synopsis of this presentation at a later date.

# HUNTERDON COUNTY.

Morris H. Leaver, M.D., Reporter.

The annual meeting of the Hunterdon County Medical Society was held at Flemington, N. J., Oct. 28, 1924, with a good attendance of the membership.

Dr. Henry O. Reik, the present editor of the "Journal," was present and addressed the society on the work of the State Society and the Journal, which was very interesting and gained for him the esteem of the entire society by his genial personality and sympathetic grasp of the problems facing the rural medical society.

Under reports of sections, the chairman of the section on practice of medicine, Dr. L. T. Salmon, reported the following case of Angina Pectoris. "An active business man aged 64, giving a history of New York club life habits for twenty years, began with a list of symptoms which contained nothing new in the category of angina vera. Wassermann four plus. He was retired from work and put at rest in the country. In the early part of August, 1924, he was subjected, after a decided increase in the number and severity of his attacks, and an investigation which typed him well for operation, to an operation for the removal of the three ganglia, and the trunk connecting these, found in the cervical sympathetic. Those on the left side were removed under local anesthesia and partial gas. Following this operation the patient made an uneventful recovery and was relieved immediately of the major pains which had been annoying him. There appeared, however, a list of almost equally distressing pains and functional disturbances which kept him still an invalid. Sweatings, anesthetic and hyperesthetic areas; left shoulder pains with joint



fixation following, in consequence of inability to comfortably move the joint; an occasional phantom pain in the right upper chest and a very decided neuralgic pain in the right side of the head, migrainous in type, and occasionally alternating with other pains in the upper left quarter of the body. After six weeks of relief from the precordial pain, the old pains again began to appear, gathering in force and frequency, until, at the end of another four weeks, nothing lacked of the original condition. A delay of two weeks in going for the removal of the right chain of sympathetics allowed a most alarming degree of recurrence to develop and with some misgivings I took him again for operation. He died the night before the proposed operation, in an attack of pain. At postmortem, a much sclerosed arch of the aorta, especially in the first and second portions, and much sclerosed coronaries, one being almost occluded, made up the picture. This pathologic picture, visualized only in slight degree before operation, might have deterred the surgeon, had it been possible to have seen it before operation and should at least add its weight to caution in considering operation in these cases. Its real value was only in that it added a hope to the patient that, maybe, was worth the experience."

Dr. L. C. Williams reported continuance of improvement in the case of glycosuria which had been under his care and upon which he had reported at the last meeting.

The other sections made no report, and a committee was appointed to consider the advisability of reorganizing the section work of the society, so that more and better reports may be forthcoming.

When the election of officers for the ensuing year was taken up Dr. O. H. Sproul, who has been the Secretary of the Society continuously for the past fifty-four years, declined reelection and Dr. L. T. Salmon of Lambertville was unanimously elected to succeed him.

The following officers were also elected: President, Austin H. Coleman, of Clinton. First Vice-President: Grenelle B. Tompkins, of Flemington. Second Vice-President: Louis C. Williams, of Lambertville. Treasurer: Edward W. Clossom, of Lambertville. Reporter: Morris H. Leaver, of Quakertown.

The Society then adjourned for dinner at the County Hotel, where they were joined by Dr. J. Bennett Morrison, Secretary of the State Society, who made an after-dinner speech on the work of the State Society which was enthusiastically received by his audience.

We venture to express the hope that both Dr. Morrison and Dr. Reik will be able to visit us again soon.

#### MERCER COUNTY.

A. Dunbar Hutchinson, M.D., Reporter.

Annual meeting held at Trenton, December 10, 1924.

The society was highly honored with the presence of Dr. L. F. Donohoe, Acting President of the State Society, who delivered an address, confining his remarks to the subject of coöperation and support of the State Officers by the County Societies.

Dr. J. Bennet Morrison, Recording Secretary of the State Society, also favored the members

with a very comprehensive and enlightening talk on the work of the Legislative Branch of the Society, with emphasis placed upon the many advantages to be enjoyed by affiliation with County Societies.

The following officers and applicants were elected, with several applications read and referred to the Membership Committee:

President: D. Leo Haggerty. Vice-President: John B. Comfort. Secretary-Reporter: A. Dunbar Hutchinson. Treasurer: Harry R. North. Nominating Committee: James J. McGuire.

Annual Delegates: Samuel Sica, F. G. Scammell, D. L. Haggerty, L. H. Rogers, H. J. Collins. Alternate Delegates: J. B. Comfort, H. D. Williams, J. M. Schildkraut, Paul E. Kuhl, P. B. Means.

Permanent Delegates: David B. Ackley, M. W. Reddan, H. R. North.

Censors: Wm. G. Schauffer, 3 years; G. N. J. Sommer, 2 years; G. R. Moore, 1 year.

Membership and Program Committees to be appointed later.

Newly elected members: Elston H. Bergen, A. K. Bowman, A. T. Bruere, J. N. Richards, and James J. O'Rourke.

#### MIDDLESEX COUNTY.

F. C. Johnson, M.D., Reporter.

The annual meeting of the Middlesex County Medical Society was held at the Hotel Klein, New Brunswick, December 17, 1924. The meeting was called to order by the president, Dr. A. C. Smith, at 4:30 P. M. The following officers were elected for the ensuing year: President: J. F. Weber, South Amboy. Vice-President: J. P. Schureman, New Brunswick. Secretary: Edward Klein, Perth Amboy. Treasurer: F. C. Johnson, New Brunswick. Delegates to State Society: F. M. Hoffman, New Brunswick; L. Y. Lippincott, Metuchen; Edward Klein, Perth Amboy. Alternates: Joseph Mark, Woodbridge; S. E. Selover, South River; R. L. McKiernan, New Brunswick.

The names of 3 candidates for membership were presented and referred to the Committee on Credentials. The scientific program consisted of 2 very interesting papers: The first, by Dr. F. C. Henry, Jr., on "Duodenal Ulcer; Its Etiology and Treatment," and the second by Dr. L. K. Riggs, of the Squibb Laboratories on "Recent Progress in Anesthesia." Dr. Riggs demonstrated the effect of various new anesthetic gases upon white rats, explaining particularly the difference between the actions of Ethylene and Propylene.

The following resolution upon the death of Dr. D. C. English was read and adopted:

Dr. David C. English died on September 19, 1924, in his eighty-third year. He was one of the oldest members of the society, yet one of the youngest from the point of activity. For many years he was a power in the administration of our State Society, which position he acquired by his devotion to the medical profession, and his honesty of purpose. He had held the office of President of the Middlesex County Medical Society, and President of the New Jersey State Medical Society, and was Treasurer of both societies for many years. He was of the rare type of the old family doctor and as such was known and beloved not only by his brother physicians but by numerous individuals outside of the profession.

The office in which he took particular pride was one that would tax any man—that of Editor of the State Journal, which office he held for many years. His extraordinary ability as Editor showed, for a man of his years, an aptitude for work and a mentality that few men attain.

Dr. English was not only a good physician but a good



Theologian. He was an inspiration to the young men and an example to the older men, and as such his traits of character will be remembered in years to come as examples from a wonderful man who was old but yet young, and a physician who never tired in his work for the welfare of humanity and of his brother physicians.

Resolved that these resolutions be entered on our minutes, and a copy thereof be sent to the bereaved family.

Committee on the Middlesex County Med. Soc.  
B. M. Howley, M.D.  
Jas. L. Fagan, M.D.

At the conclusion of the scientific and business portions of the program, the society adjourned to the dining room of the Hotel Klein where a testimonial dinner was given in honor of Dr. J. Warren Rice upon the completion of 50 years of service in the practice of medicine. Dr. Smith, as toastmaster, presented to Dr. Rice a gold-mounted cane as a token of appreciation and affection of the members of the County Society. Dr. Rice responded with a brief address of thanks and a sketchy outline of the important things observed during his first 50 years of practice and expressed the assurance that he was ready and willing to continue his work for another long period.

Dr. Lucius F. Donohoe, President of the State Society; Dr. J. Bennett Morrison, Secretary of the State Society; and, Dr. Henry O. Reik, Editor of the State Society Journal, were all present as guests, and each addressed the meeting in explanation of the work being carried on by the officers and committees of the state organization.

With a vote of thanks to the guests and to those who had participated in the program the meeting adjourned.

### MONMOUTH COUNTY.

Harvey S. Brown, M.D., Reporter.

The regular monthly meeting of the Monmouth County Medical Society was held at the Elk's Club, Long Branch, N. J., Friday, November 28, 1924, at 8.30 P. M.

After the election of new members, Dr. Warren of Red Bank, spoke on the work of the Welfare Committee of the State Society. Dr. E. J. Purcell, of Newton, N. J., read a paper on "Treatment of Eclampsia," which was well received and fully discussed. After a lunch the society adjourned until the annual meeting to be held in December in Freehold.

### MORRIS COUNTY.

Marcus A. Curry, M.D., Reporter.

The quarterly meeting of the Morris County Medical Society was held on the evening of Tuesday, December 9, in the spacious ballroom of the Woman's Community Club in Morristown. President McMurtrie presided over the meeting which was by far more largely attended than usual; there being approximately fifty present. Among the guests were Drs. Lein, Gambill, Roche and Wilson, comparatively new acquisitions to the staff of the State Hospital at Morris Plains.

Two new members were elected: Dr. Edward Carberry of Wharton and Dr. T. R. Ford of the State Hospital medical staff, Greystone Park, N. J. Also two honorary members were elected: Dr. Granville M. White of Morristown, and Dr. Augustus S. Knight of Gladstone. Two proposals for membership were received and referred to the committee on credentials.

A communication from Dr. D. H. McAlpin,

of the Board of Trustees of the County Home for Children at Parsippany, was read, expressing recognition and appreciation of the recent donation by the society of \$500 for that worthy cause.

A communication from Dr. McAlpin was also read looking to the formation of a committee of the society to function in connection with the Children's Home, and was referred to the Executive Committee.

Treasurer Reed made his usual praiseworthy report of the society's finances, showing a balance of nearly 1400.

The routine business being completed, President McMurtrie introduced the speaker of the evening "Dr. Seward Erdman, of New York City, well-known to everybody in Morristown."

Prefacing his subject by saying: "Mr. President and gentlemen of Morris County, it is a great pleasure to be out here; I feel at home coming back to familiar grounds, as it is my boyhood home, although I haven't been back in recent years," Dr. Erdman read a profoundly interesting paper on the subject of "Gastro-duodenal Ulcers and Surgical Indications." The paper (promised for publication in the Journal) was extensively discussed; Drs. Glazebrook, Flagge, Mills, Lathrope and Haven taking prominent parts; and the points of the discussion were painstakingly covered by Dr. Erdman in response.

Dr. Erdman's subject, which was elucidated not only from the surgeon's but from the general practitioner's standpoint, was followed intently by the members and guests and the interest so manifestly aroused must have been as pleasing to him as it was gratifying to the officers and members of the society who are striving for its best interests. Perhaps needless to record, Dr. Erdman was given a sincere rising vote of thanks for his uncommonly interesting paper so lucidly delivered.

It was decided to hold the March meeting of the society at Dover, when a symposium will be entered into by members of the society upon a subject to be assigned by the Executive Committee. Volunteers will be called for and if not adequately answered, the draft will be resorted to.

The cuisine of the Women's Community Club was given a severe test by the members and guests of the society, with the unanimous result that the well-known reputation of the Club for excellence suffered no diminution.

### PASSAIC COUNTY.

Louis G. Shapiro, M.D., Reporter.

The December meeting of the Passaic County Medical Society was held in the Chamber of Commerce Rooms, on Thursday evening, December 11. Dr. John N. Ryan presided. The meeting was called to order at 9.15 P. M. Thirty-three members were present.

Dr. James F. Grattan of New York gave the talk of the evening on "Plastic Surgery of the Face," with lantern slide illustrations. Dr. Grattan limited his subject to the consideration of the surgical treatment of rhinophyma and of saddle nose. The slides of 5 cases, illustrated the results obtained by an operative procedure in which sufficient skin flaps were saved from the sides of the tumor in cases of rhinophyma, to restore the normal nose. In spite of the fact that these flaps were not nor-

mal skin, no recurrence of the growths developed. Operation was followed by x-ray treatment and applications of 50% trichloroacetic acid to reduce the scar and the thickening of the unhealthy skin. Results obtained were very good. Pictures of 2 cases of saddle nose, before and after repair by grafting costal cartilage, were shown. Dr. Henion discussed the occurrence of abscess of the septum following trauma, etc., without any luetic basis, and stated that saddle nose results in these cases, unless the abscess is incised early enough to prevent destruction of the septum. Dr. MacLay discussed the operative technic. Dr. Wishnack brought up the question of keloid and the possibility of its treatment with trichloroacetic acid. Dr. Mitchell spoke on the use of trichloroacetic acid in dermatology and advised against its use in keloid, as did Dr. Grattan. The discussion was closed by Dr. Grattan, after which a vote of thanks was extended to him by the society.

Dr. Joseph Barolsky, 84 Ward St., Paterson, and Dr. Donald B. Low, 529 Broadway, Paterson, were elected to membership.

Dr. Robert R. Armstrong, of Passaic, addressed the society and besought its aid. Dr. Armstrong stated that he had been elected freeholder after a campaign in which he had stressed the inadequacy of the institutions in the County of Passaic, the lack of proper provision for the feeble-minded, the insane, the chronic cases that could not be cared for indefinitely in general hospitals, and the indigent. Dr. Armstrong requested the appointment of a committee to cooperate with him in determining the institutional needs of the county and the relative urgency of different accommodations necessary, so that he might present a definite plan to the Board of Freeholders.

The Chair was empowered to appoint such a committee to cooperate with Dr. Armstrong.

Before closing the last meeting of the year, Dr. Ryan spoke about the pleasure he had derived from directing the affairs of the society during the year and thanked the members for their cooperation and attendance.

#### SALEM COUNTY.

William H. James, M.D., Reporter.

The regular meeting of the Salem County Medical Society was held on the afternoon of December 10, at the Memorial Hospital, Salem, N. J., with Dr. G. A. Davies in the chair. After the regular business of the society was transacted, we had the great pleasure of hearing two most excellent papers. The first was by Dr. William H. Schmidt, of Philadelphia, who took for his subject "Cancer; Relative Value of Surgery, X-rays, and Radium in Treatment." The paper was illustrated with lantern slides of cases before and after treatment. There were 3 points that were very important to be considered: (1), History of patients as regards kidneys; (2), Nervous condition of patient; (3), Never tell patients that they have cancer. In epithelioma, electrothermic treatment was much better than x-ray or surgery. In other forms radium was the best treatment. The great point in treatment is to see the case early.

The second paper was read by Dr. Clarence L. Andrews, President of Atlantic County Medical Society, who took for his subject "Interest-

ing Observations in Alcoholic Poisoning." He gave a very interesting account of the treatment of cases from wood alcohol poison when patients were blind and in a moribund condition.

Drs. Schmidt and Andrews were given a rising vote of thanks for their very interesting talks.

There were a number of visitors present, including Dr. Samuel Ashcraft, Dr. Downs and Dr. Stout from Gloucester County; Dr. Moore from Camden, N. J., and Dr. Stein from Philadelphia.

At the conclusion of the meeting, the society was invited to the dining-room, where a sumptuous repast was provided, under the direction of Miss Hannah Harris, superintendent of the nurses at the hospital.

The next meeting will be held February 11, 1925, at 2 P. M., at Memorial Hospital.

#### SOMERSET COUNTY.

Dan S. Renner, M.D., Reporter.

The regular meeting of the Somerset County Medical Society was held in the Court House, Somerville, N. J., on December 11, 1924, at 3.30 P. M. The meeting was called to order by Dr. Frederick A. Wild, who acted in the absence of Dr. Philip Embury, and the routine business was cared for.

Drs. Lucius F. Donohoe, President, and J. Bennett Morrison, Secretary of the State Society, and Dr. Henry O. Reik, Editor of the State Journal were guests at the meeting.

Dr. Donohoe gave us some very sound and much appreciated advice. Dr. Morrison gave a talk on the Welfare Work of the Society.

These gentlemen have definite plans for the benefit of the Medical Profession and if we, the Component Medical Societies, give them the deserved support, we may confidently expect to have our profession more firmly united by their efforts.

Dr. Reik gave us a general outline of his plans of work. He made a special appeal to the reporters to get the reports of the meetings to him. In fact, he left the impression that he would keep the standard of the Journal up to, or better than its former high plane if the local reporters would do their part. Come on, Brother Reporters, make him prove it.

*(This challenge is accepted, not only for friend Renner but for all County Reporters. Confessing to a life-long subconscious desire to be another D'Artagnan, (though more generally fitted for a Quixote), the Editor draws his sword and, single handed, will take you all on for this combat; and, "Damned be he who first cries, 'hold enough.'")*

#### Death.

HARRIS.—Dr. Philander A. Harris, of Paterson, New Jersey, died at his home, 453 Park Avenue, December 13, 1924, in the seventy-third year of his life.

Dr. Harris was born in Warren County, New Jersey, January 29, 1852, the son of Cummins Q. and Abigail Wintermute Harris. He received his early education in the district schools of that region and later graduated from the University of Michigan and took his Medical Degree, in 1873, from the College of Physicians and Surgeons of Columbia Uni-



versity, New York. For more than fifty years, Dr. Harris practiced in the City of Paterson, serving for a time as Commissioner of Health, and occupying important positions on the Staff of the Paterson General Hospital, the Barnert Hospital, the Passaic General Hospital and the New Jersey Hospital at Greystone Park. Dr. Harris was the author of several Medical Text-books and of numerous monographic contributions to gynecologic and surgical subjects. He was a member of the Passaic County Medical Society, the New Jersey State Society, The American Medical Association, The New York Academy of Medicine, the American College of Surgeons, the American Gynecological Society, The Society of Surgeons of New Jersey, The Lehigh Valley Medical Society, and corresponding member of the Gynecologic and Obstetric Society of Paris, France. He had been president of the Passaic County Medical Society and Vice-President of the American Medical Association.

Dr. Harris was married in Paterson, November 15, 1876, to Miss Margaret Rowson, daughter of the late Thomas Rowson, of Macclesfield, England, and he is survived by the widow and one daughter, Miss Grace Abbey Harris.

## Book Reviews.

*All books received will be mentioned by title with the names of their authors, publishers, etc., and this will be considered by the committee as sufficient acknowledgment to the publishers. Selections will be made for review as the merits of the books or the interests of our subscribers may warrant.*

**A Manual of Gynecology and Pelvic Surgery for Students and Practitioners**, by Roland E. Skeel, M.D., A.M., M.S., formerly Associate Clinical Professor of Gynecology, Medical School of Western Reserve University. Second Edition, 674 pages; 28 illustrations. Published by P. Blakiston's Son & Company, Philadelphia, Pa.

This work is distinctly a compact, condensed manual concerning the diseases discussed and makes no claim to being a treatise on Gynecology. The author calls attention to the great extension of the use of radium and Roentgen Ray in the treatment of many of the diseases of women, and congratulates the profession upon the lessened frequency of the mutilating operations, so indiscriminately used in former years.

Treatment, either moral, medical or surgical is suggested in few words but the text is well assisted by numerous illustrations, showing the various steps in the operative procedure.

The author's remarks on acute appendicitis are interesting. He writes: "On the whole the exact mortality rate of acute appendicitis is unknown. There is no justification for the belief of many surgeons that most cases would die if not operated upon, but there is less justification for a waiting policy which condemns many to recurring attacks, fecal fistulae, and prolonged convalescence. There is no surgical disease in which the symptoms and physical signs convey so little knowledge of the ultimate outcome as acute appendicitis, those cases which seem to be very mild often terminating disastrously, and those with the severest possible onset recovering in a surpris-

ingly short time," but he wisely concludes, "There is but one proper treatment for appendicitis in its early stages and that is operation. One operates not because all the patients would die if unoperated, but because it is impossible to determine which one will." This is safe and sane advice and is characteristic of the author's opinions throughout the book.

**The Science and Art of Anesthesia.** 214 pages, illustrated. Price, \$4.75. Anaesthesia for Nurses, by Colonel William Webster, D.S.O., M.D., C.N., Professor of Anesthesiology, University Manitoba Medical School, 153 pages, illustrated. Price, \$2.00. Published by the C. V. Mosby Company, St. Louis, Mo.

These two volumes, by the same author, represent Colonel Webster's views on this subject of Anesthesia, as to what should be especially studied by the physician or the nurse who may be called to attend to this important adjunct of surgical work.

The author also suggests that the larger book has been written concisely, and particularly for the occasional anesthetist rather than for one who devotes the greater part of his time to such work and in the book for nurses, he has still further simplified his conclusions and directions.

The larger volume opens with the description of the ancient drugs and methods that were used to induce temporary unconsciousness and follows with a chapter on the physiology of anesthesia.

Further on the usual anesthetics with the mode of administration and the especial dangers of each one are considered in detail, as also the combination of these drugs which have been tried or are still in use.

There is a useful chapter on local anesthesia and spinal analgesia which latter method he evidently looks upon as hazardous, estimating its mortality as at least one in five hundred.

The smaller volume discusses all these points but naturally in a simpler and less extended manner.

Either the professional man or the nurse who cultivates the anesthetic art only occasionally will find in these compact little volumes much that will prove of value to them in this work.

**International Clinics.** Vol. III., Thirty-fourth Series, 1924. Published by J. B. Lippincott Co., Philadelphia.

The three hundred pages of this high-class quarterly is, as usual, filled with good material.

An article on The Outlook in Insulin Treatment is of value as showing the probability of a gradual diminution in the daily doses required; another on the Clinical Consideration of the Management of Peptic Ulcer is noteworthy and a paper by Dr. James J. Walsh on Health Examination and Some Unfortunate Effects is so full of strong common sense, sometimes spoken of as "horse sense" that, to the reviewer, it is alone worth the price of the whole volume.

Dr. Walsh always writes and talks in a style that is entertaining and instructive, but this particular paper should be read and profited by all of us, who call ourselves, just ordinary medical men.



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Continued from page XIV.

tain conditions commonly ascribed to putrefactive products in the colon. Battle Creek Food Co., Battle Creek, Mich.

Pituitary Extract-Lilly (Obstetrical).—A slightly acid aqueous solution containing the water soluble principle or principles of the fresh posterior lobe of the pituitary body of cattle. It is tested for oxytocic action on the isolated uterus of the virgin guinea-pig against a standard solution prepared from defatted desiccated posterior lobe powder and adjusted so that its strength is equal to that of a 5 per cent. solution of the fresh posterior lobe of the pituitary gland. For a discussion of the actions and uses, see general article, Pituitary Gland, New and Nonofficial Remedies, 1924, p. 225. Pituitary extract-Lilly (obstetrical) is marketed in ampules containing 0.5 Cc. and 1 Cc., respectively. Eli Lilly and Co., Indianapolis.

Pituitary Extract-Lilly (Surgical).—A slightly acid aqueous solution containing the water soluble principle or principles of the fresh posterior lobe of the pituitary body of cattle. It is tested for its pressor action on the blood pressure of mammals and for oxytocic action on the isolated uterus of the virgin guinea-pig against a standard solution prepared from defatted, desiccated posterior lobe powder and adjusted so that its strength is equivalent to that of a 10 per cent. solution of the fresh posterior portion of the pituitary gland. For a discussion of the actions and uses, see general article, Pituitary Gland,

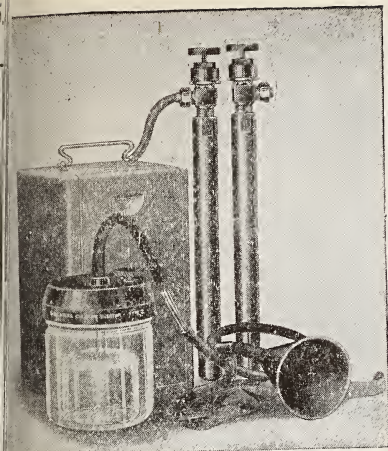
New and Nonofficial Remedies, 1924, p. 225. Pituitary extract-Lilly (surgical) is marketed in ampules containing 1 Cc. Eli Lilly and Co., Indianapolis.

Culture Bacillus Acidophilus-Medical Laboratories, Inc.—A broth culture of bacillus acidophilus in bottles containing about 120 Cc. It contains from 250 to 500 million of viable organisms (*B. acidophilus*) per Cc. at the time of sale. For a discussion of the actions and uses, see Lactic Acid-Producing Organisms and Preparations (New and Nonofficial Remedies, 1924, p. 169). Medical Laboratories, Inc., New York. (Journal A. M. A., Nov. 15, 1924, p. 1589).

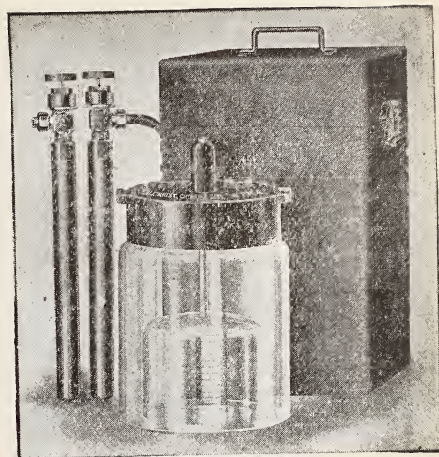
Intarvin.—An artificial fat made from fatty acids having an odd number of carbon atoms. Intarvin is composed of the glyceryl esters of margaric acid admixed with small quantities of the glyceryl esters of pentadecylic, palmitic and stearic acids, 82 per cent.; liquid petrolatum, 12 per cent.; water, 6 per cent. Intarvin is proposed for use in diabetes mellitus on the ground that fatty acids containing an odd number of carbon atoms do not yield ketone bodies on oxidation in the normal or diabetic organisms, and that for this reason it may with advantage replace the natural fat in the diet. The evidence indicates that intarvin does not increase the production and may reduce the production of ketones in certain cases; that it has protein sparing-action; that sugar is formed from it in small amounts on carbohydrate metabolism in the human organism; that its unpalatable taste is a draw-

Continued on page XXII.





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Continued from page XVIII.

back to its use, and that it may prove useful in the treatment of diabetes in certain cases. Intarvin Co., Inc., Long Island City, N. Y.

Quinine Ethyl Carbonate-P. W. R.—A brand of quinine ethyl carbonate-N. N. R. (see New and Nonofficial Remedies, 1924, p. 267). Powers-Weightman-Rosengarten Co., Philadelphia. (Journal A. M. A., Nov. 22, 1924, p. 1685).

Secacornin.—Ergotin-Roche.—A solution of the active principles of ergot in a menstrum consisting of distilled water, glycerin and 7.5 per cent. of alcohol. One cubic centimeter

secacornin corresponds to 4 Gm. ergot, U. S. P. The actions and uses of secacornin are the same as those of ergot. It may be given by intramuscular injection. Hoffmann-La-Roche Chemical Works, New York. (Journal A. M. A., Nov. 29, 1924, p. 1769).

**A Biblical Scholar.**—"And do you know your Bible, my child?"

"Oh, yes; I know everything that's in it. Sister's young man's photo is in it, an' ma's recipe for face cream, an' a lock of my hair cut off when I was a baby, an' the ticket for pa's watch."—Melbourne Punch.

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## HEALTH EXAMINATIONS.

BERTRAM L. BRYANT, M.D.

Bangor, Maine.

(Read, by invitation, at the Essex County Medical Society Meeting,  
January 8, 1925.)

The idea of periodic health examinations is, of course, not new. A commercial organization has for the past 10 years or more demonstrated their value, especially to the managers of various life insurance companies who estimate a saving to themselves of 28% by frequent examinations of their policy holders. Large business corporations have been quick to see the advantage of employing people who are well and are kept well on the job, making an enormous saving in breaking in new men and in sick benefits, much more than the cost of the service. Then, the World War staged one of the greatest health examinations in history, where between 2 and 3 million young men were examined, supposedly the best of our manhood, and over 38% were found unfit for service and a much larger per cent defective. Possibly this was the reason why Secretary Weeks, on Preparedness Day, broadcasted all over the continent "The best way you can help the Nation in preparedness is to go today to your family physician and have a thorough physical examination."

Then, the value of these examinations has its other side, of a peculiar interest to the physician himself. We all have a profound admiration for Sir James MacKenzie and for his admirable work on the heart. After his 40 years of successful work he wrote a small book, which perhaps many of us have read, entitled the "Future of Medicine." He early found in his practice that most of his patients came to him with diseases so far advanced that it was impossible to cure them, and that the medical schools had taught him little of the recognition of the early symptoms of heart disease; that he had been taught to recognize the gross lesion alone and not normal functions

and the beginning of slight deviation. So he set himself to work to get his patients to come to him for regular examinations, that he might catch them at the stage when there was a possibility of prevention, or a cure, before the disease had advanced to the crippling stage. It is a book well worth reading as it will set you thinking on some of the problems that are facing us in medicine today.

Everywhere today you see in the newspapers, in the health journals and you hear in the Women's clubs and on the streets, the words "preventive medicine" broadcasted. Most people want to be well. They fear the knife and they fear disease and they are looking to the medical profession as the natural leaders to help them solve the problem.

The first move made by organized medicine in advising periodic health examinations was at the St. Louis meeting 3 years ago when the National Council of Health and Public Instruction touched upon the subject in its report. A month later the Maine Medical Association, through its house of delegates, favored the coöperation with the health agencies of the state in a campaign for health examinations. At the San Francisco meeting 2 years ago, the Maine delegate happened to be on the Reference Committee on Health and through his efforts a resolution was introduced and passed by the House of Delegates, instructing the Bureau of Health and Public Instruction to prepare blanks, and to promote interest in periodic health examinations in the State and County societies. In November of the same year, the Maine program was presented at the Secretaries' conference at Chicago, and later, the March following, at the Annual Congress of Medical Education, Medical Licensure, Public Health and Hospitals where, with other plans, it was fully discussed. In any new movement it is always up to some one to present the first plan of organization, which may be subjected to many revisions when thoroughly tried out. While this particular program may work out well in the State of Maine, it may be found of no value in other states where conditions are different. We, in fact, are looking to other states for better ideas by which we can revise our own.

This is the outline of the plan of campaign as adopted by the committee of Public Relations of the Maine Medical Association, with the approval of the State Board of Health and the Maine Public Health Association.

#### MAINE PROGRAM

(1.) Among physicians, 2 objects: (a) Value and necessity of periodic health examinations. (b) Methods and technic of conducting them.

State Journal: Monthly articles and printing of blanks.

State Associations: Speakers and general demonstrations at annual meetings.

County Societies: One meeting a year devoted to this subject, with speakers furnished by request and, if possible, a demonstration clinic. Organization of county committees of public relations, under the direction of the committee of public relations of the state associations; these committees to have charge of the work of their counties in detail. Coöperative health clinics by the 3 major associations, with demonstrations.

General: Mailing to each physician in the state a personal letter, with instructions and blanks, by the State Medical Association; also a personal letter from the State Board of Health and the Maine Public Health Association.

(2.) Among citizens.

State Board of Health: Through its bulletins. Through all its officers in the field and various departments, especially child welfare and nursing.

Maine Public Health Association: Through its publications. Through affiliated societies. Public press. Public health nurses. Various departments, such as the cancer division, emphasizing the necessity of general physical examinations to discover the special defects covered by these immediate fields. A standard lecture prepared by the 3 groups but issued in the name only of the State Department of Health and the Maine Public Health Association; this lecture to be circulated and read before all lay organizations.

In carrying out any health program, we have always considered it good policy to approach the physicians first, not only seeking their coöperation but that they may see the importance and necessity of fitting themselves to carry it out. The success of the work depends upon their coöperation and upon their being educated to carry it on. This work cannot be done by revival meeting methods, but only through years of educational work. We cannot expect the profession in one night to change from the viewpoint of traditional pathologic methods to those of more progressive preventive medicine, for many a change will be impossible unless the members are finally driven to it by the demands of their own clientele. Each must be impressed with the fact that we as a profession are further away from the public than any other business or profession; that less than half of the people today are regularly consulting physicians; that while we may be doing the greatest possible service for the public, we will be bringing the physicians and the people into closer contact and a better understanding, and furnishing the best antidote possible for the popular cults. This work among physicians is a coöperative one, led by the State Medical Association, assisted by the State Board of Health and the Maine Public Health Association.



Articles on health examination will be carried in the state journal. We have had an examination blank printed, simplified somewhat from that issued by the American Medical Association. This is printed in duplicate and folds at the back with columns running up and down instead of across. On the side of the blank, there is space for name and address for filing. By slipping in a piece of carbon, you have a duplicate when you make the examination, so that when finished it can be torn in two and the patient given one blank and the other retained for the physician's file. If, by using this simply as a guide, we can succeed in getting a good thorough examination without a blank, we shall have accomplished a great deal.

Preparatory work has been going on for some time through the meetings of the county societies, conducted by the various officers of the state medical association, the president, secretary and councilors. This will be continued systematically by its committee of public relations, a coöperative committee made up of physicians from the 3 major health groups, including officers and members of the State Board of Health and the Maine Public Health Association. Under their direction, county committees have been appointed in nearly all the county societies. These committees will have charge of the detail work in the counties. They will arrange meetings, select speakers and help make the proper contact with the lay organizations.

Coöperative health clinics have already proved a great success. They have been carried through in different parts of the state and more have been planned. These clinics are arranged by the 3 major groups in conjunction with a county or group of county societies. Medical and surgical clinics are held in the hospitals forenoons, while the afternoon meetings are arranged, one by the State Board of Health, the other by the Maine Public Health Association. A general union meeting is held the first evening, ending with a banquet for the purpose of a general getting together of all 3 groups, physicians, nurses and lay workers. Talks are given by the principal speakers of the different meetings, thus bringing the workers of all groups together and offering opportunity of closer acquaintance with each other and different branches of the whole health plan. These clinics have been very successful.

Unfortunately, our medical school which had been doing first-class work for a century, was deleted during the high tide of hysteric medical reform and sacrificed to the fetish of an arbitrary standard of organization. When it needed the helping hand most and time and assistance for reorganization, it received the axe. For this reason it will be very difficult to provide the necessary postgraduate instruction for this work of health examination which

we had planned, among other things, before being deprived of our teaching center.

We are mailing to each physician a personal letter together with blanks and a reprint of instruction on the necessity and methods of making proper health examinations. This will be followed by other letters from the state department of health and Maine Public Health Association. All physicians will be advised to impress upon their patients in a personal way the value of coming once a year at least for a thorough physical examination.

This closes the campaign as planned among physicians, and it will be carried out just as soon as possible, but sustained over a long period.

As for the campaign among the people, we considered it not good policy for physicians to appear as a group in conducting this campaign, nor wise for them to go out and issue an invitation for the public to come into their offices. This would be interpreted as a scheme for the personal advantage of the physician, who would profit from the examination. This campaign will be conducted solely by the state board of health and the Maine Public Health Association. Under the state department of health the state is divided into districts, each in charge of a state health officer. These officers will be instructed how, in general, to get the idea to the people in their health meeting talks. Their department of nursing and of child welfare will be especially efficient, having charge of all public health nurses, both of the state department and of the Maine Public Health Association. The Maine Public Health Association, through its publication, its affiliated societies and the public press, is better able than anyone else to carry on a publicity campaign. There would be no feeling that any physician is in any way advertising himself or getting any advantage from carrying on this work. Through the public health nurses and through various departments, such as the cancer division, a thorough canvass will be carried out in conducting the campaign, emphasizing the necessity of general physical examinations to discover special defects. This will be done, not only by the cancer division, but by the dental hygiene division, the nursing division, the child welfare division and the antituberculosis division, where it is absolutely necessary to emphasize the importance of discovering specific diseases by this general overhauling or thorough physical examination.

A standard lecture will be prepared by the 3 groups, but issued in the name of the state health department and the Maine Public Health Association. This lecture is to be circulated and read before the lay organizations, such as organized labor, Women's clubs, churches and all others affiliated with this group. We are doing this successfully in the cancer division with the public health association at the present time.

The 3 major groups, the State Department of Health, the Maine Public Health Association and the Maine Medical Association with all the affiliating societies are conducted in such a manner that they are able to act as a unit through a committee of public relations. This committee is made up of the Health Commissioner, the President of the Maine Public Health Association, the Secretary and Editor of the Maine Medical Journal, and 3 others, physicians prominent in health work.

Such is the Maine plan we are trying to carry out today. We acknowledge its imperfections and may be obliged to modify it in many ways. But it seems the best adapted to our local conditions. We do not expect quick results, it means a campaign of many years.

Now what has been done elsewhere?

The Bureau of Health and Public Instruction of the A. M. A. has printed examination blanks and one pamphlet of instruction, and has another in preparation. It has asked the medical schools to coöperate in giving special instruction in health examinations. Several have responded. The University of California is examining all its students as a practical demonstration, and has found in that select body 95% defective. Papers and editorials have been published in the Journal, the Bulletin, and in Hygeia.

Pennsylvania is putting on an excellent course of postgraduate clinics which have been well attended, and demonstrations at the annual meeting urging the physicians themselves to come for examination; and, has printed a blank. Several other states are putting on clinics and demonstrations. Brooklyn County is coöperating with the National Health Council and has sent blanks and circulars to the physicians and had a demonstration clinic among physicians. New York County has printed a book of instructions for the physicians, with a bibliography of papers on the subject. In Massachusetts, their committee has just brought in an excellent report published in November in the Boston Medical and Surgical Journal, and has printed a blank very much simplified for the use of the physicians.

Many other states are working on the problem, shaping it to fit their individual needs, and doubtless in the near future we shall have some very good reports which will be a great help to the whole of us. Doctor Schmitt's paper, published in the Proceedings of the Medical Education, Medical Licensure, Public Health and Hospitals, together with the discussions, should be read with interest by anyone planning a county program.

The more we study the problem the more convinced we are that the general practitioner or family physician is the one best qualified to make these examinations, and that the most successful program will be the one best adapted to his needs.

A proprietor was looking for a man to take charge of his repair



shop in a large garage. Some one had told him of a mechanic who must have had good training, for he had worked 10 years in a Detroit automobile factory, and would doubtless be just the man for the job. So he was sent for and the proposition put up to him. His qualifications were that as an expert in the assembling department he had tightened nut 69 for the whole 10 years. Undoubtedly he knew his job, but he was hardly the man to take the general oversight of the repair department. So, in this work, we need a man who knows in a general way the whole job, who understands the workings of the machine as a whole, who knows when it is running in a proper, normal way and at its highest efficiency, who is able to put his finger on the one part that is not doing the work properly and knows whether the trouble is due to a mechanical defect or only to lack of proper lubrication, run down batteries, or poor gas; the man who has the general knowledge sufficient to find the trouble spot, and if he is unable to straighten it out himself, turns it over to the expert on batteries or carburetors, or even the nut expert, in one or both meanings of the word. So whatever plan is adopted, the one that is most likely to succeed will be the one best adapted to the equipment and capacity of the general family physician, for he is the one who will have to do the greater part of the work. To be attractive, or even possible, in practice it must be made to fit into his routine, adapted to a general office equipment including case files and methods of taking history. He is usually a very busy man, and has worked out a system of history records and blanks which are excellent for his needs, although they be of necessity very simple. He would balk at once at filling out a complicated history blank or crowding his office with new and expensive equipment, which is not at all necessary to successfully carry on his work. A health examination differs from other physical examinations which he has been making daily only in viewpoint and completeness. Really all first examinations of new patients should be the same. If we can impress upon the physician the necessity of a full and complete physical examination for every new patient, with a well recorded history, and if he can impress upon the patient the necessity of returning at least once a year to be checked up by the first findings, the object of periodic health examinations will have been accomplished in a very simple and natural way.

#### CONCLUSIONS.

The intelligent class of people, I believe, are more impressed with the value and importance of this work than the rank and file of physicians themselves. They want to keep well, and prefer, on the whole, to be taught how to keep their organs in a healthy condition than to have them rejuvenated even by the most scientific of modern processes.

Upon the general practitioner will fall the necessity of doing the greater part of this work, and on the whole he is the man best qualified by actual experience to do it.

Any plan of examination to succeed must be simple and the one best adapted to his needs and equipment.

He should be given every possible help through clinics and postgraduate courses to fit himself to make better and more comprehensive physical examinations on all who come to his office.

He should be assured of ample financial compensation for his work.

This is a campaign of education and to succeed needs the co-operation with the physicians of all those agents and organizations that are working for health.

It must of necessity be carried on for such a period of years as will guarantee to all who wish sufficient thorough physical examinations to keep them at their highest efficiency, the proper facilities to obtain them.

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## RECENT DEVELOPMENT WITH REGARD TO CHLORINE TREATMENT OF CERTAIN RESPIRATORY DISEASES.

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Read before the Fiftieth Annual Session of the New Jersey Sanitary Association, Atlantic City, Dec. 5, 1924.

Before the publication of the article by Vedder and Sawyer<sup>(1)</sup> in the March 8 number of the Journal of the American Medical Association, we had been working on this subject for approximately a year and a half. Our chlorine gassing chamber has been in continuous operation at Edgewood Arsenal since that time, and the results obtained in the treatment of infections of the upper respiratory tract continue to be excellent.

In our first paper we attributed the results that we secured to the bactericidal action of the chlorine. Many bacteria are indeed killed, but further study convinced us that this is not the sole therapeutic action of chlorine by any means. Chlorine is a powerful oxidizing agent. Hypochlorous acid is formed by union with water which in turn is reduced to hydrochloric acid with liberation of nascent oxygen. Hypochlorous acid acting in this way possesses in high degree the property of decomposing toxins, and of reducing the toxicity of organisms. It seems probable therefore, that such organisms as survive the exposure, and may even grow on an agar plate, have their virulence greatly reduced.

In addition to these actions on the infecting organisms, chlorine also produces a marked effect upon the mucous membranes of the respiratory tract. The action of any irritant, including chlorine, on the capillaries, is to cause a primary brief constriction, followed by a much larger dilatation. Thus a hypermia of the affected mucous membranes is produced which is also conducive to recovery.

This dilatation of the capillaries in hyperemia is also followed by an increase in the number of phagocytes which cling to the vessel walls and escape into the tissues by diapedesis. We have evidence that this also occurs after the administration of chlorine.

We have been making leukocyte counts on patients before admission to the chamber, after an hour exposure and one hour after leaving the chamber. The results naturally vary somewhat but there is no doubt as to the general trend. There is a significant drop in the number of leukocytes in the peripheral blood after an hour of exposure in the chamber, and the count has not quite returned to normal an hour later. In some cases this drop in the leukocytes is marked. The average of our first 20 counts was as follows:

Before exposure	After exposure	One hour after exposure
8550	6680	7680

There are also a number of experiments which indicate that physiologically active oxygen stimulates immunologic processes. All of these physiologic actions of chlorine may be concerned in the production of therapeutic results, in the treatment of infections of the upper respiratory tract, in addition to its undoubted sterilizing action.

But the apparatus that we use is not suitable for use by others, and our greatest problem has been to develop apparatus that can be generally used. It is perfectly obvious that there can be no general acceptance of this method of treatment until results similar to ours are secured and published by independent observers. Yet no such results can be secured without apparatus. Before the publication of our first paper we had consulted with the Wallace and Tiernan Company of Newark, N. J., and they made for us the small portable apparatus consisting of 2 small cylinders of liquid chlorine and a measuring device that was described in our first article. We have kept in touch with the Wallace and Tiernan Company since that time. We have been criticized for this action, and expect more criticism. If there is no apparatus there can be no treatment and it is just as ethical to request a firm to make this apparatus as it is for a surgeon to ask an instrument maker for a new instrument. The fact that the instrument maker will subsequently sell this at a profit does not affect the ethical status of the surgeon. So far as Captain Sawyer and myself are concerned, we are making absolutely no profit from this work nor shall we attempt to do so. So far as



the Wallace and Tiernan Company is concerned, work in this field has so far cost them far more than they have received.

The small portable apparatus described in our article has given good results in our hands. But this apparatus was subsequently submitted for test to a board of officers at Walter Reed Hospital, and the board rendered an adverse report.

We have found that the therapeutic limits of chlorine are very narrow. We use a concentration of .015 mg. per liter for an hour. A concentration of .017 is distinctly irritating and may do harm rather than good, while concentrations below .013 may be quite ineffective. This means that the concentration must be maintained for 1 hour between say .014-.016 mg. per liter. This is a very difficult thing to do by releasing chlorine in a small room, for the amount of chlorine required will vary widely with the nature of the room and the number of persons to be treated. The concentration actually present was gauged by the sense of smell. From the results which both we and Colonel Gilchrist have obtained with this type of apparatus, I am certain that good results may be obtained by a person having considerable training. I am equally convinced, from its flat failure at Walter Reed, that this type of apparatus is not suitable for use by physicians in general. It is, moreover, unscientific, for if it is not practicable to make constant analyses of the gas-air mixture as we do in our chlorine chamber; the apparatus used by the physician should be so constructed as to supply the proper concentration to the patient automatically.

The inhalator which is now being made by the Wallace and Tiernan Company does just this. The box contains a motor and fan which delivers a definite flow of air through the orifice. This fan runs on the electric lighting current, and the air delivered is metered while variations in current may be corrected by turning a rheostat. The chlorine that is mixed with this air is generated in an electrolytic cell. Since the amount of chlorine so generated depends directly upon the amount of current flowing through the cell, the amount of current used is also metered by a delicate ammeter and controlled by a rheostat. By this means, a constant flow of air with a constant amount of chlorine is secured for the hour of exposure.

A questionnaire was recently sent to physicians using this type of equipment. The case results they reported may be tabulated as follows:

	Total cases, 1029.
Cures	656, or 64%
Improved	312, or 30%
No change	51, or 6%

The cases treated were mostly acute coryza and bronchitis, but a few cases of whooping-cough were treated with favorable results.

This type of apparatus is very convenient for use by physicians in the office, but is not applicable for hospitals or public health clinics where numbers of patients must be treated. As health officers, you will be chiefly interested in apparatus that will maintain the desired concentration in a chamber. There are 2 types of chamber and 2 types of apparatus.

(1) *The Continuous-flow type.* This is the type we use. We have a room 10x13x13 with exit and entrance ducts. On the exit duct, is a fan capable of pulling 1500 cubic feet a minute driven by a 7½ horsepower motor. The entrance duct contains steam coils to heat the air, and the chlorine is metered into it. We learned by experience how much chlorine was required to maintain a concentration of .015 mg./liter in the chamber, and this is controlled by a frequent chemical analysis of the air in the chamber. Since the air in this chamber is renewed every minute, the number of patients we can treat at one time is only limited by the capacity of the room. Practically its capacity is 15 patients at one time. This apparatus is too bulky and expensive for general use.

It has therefore been planned for rooms of 10x10x10, in which a maximum of 10 patients will be treated at one time, to manufacture equipment that will produce a flow of 500 cubic feet per minute, together with the necessary apparatus for metering the chlorine. This equipment is so standardized as to maintain a constant concentration of .015 mg./liter in the chamber.

(2) *The closed chamber.* This is so named although such a room will never be strictly closed, but must have reasonable ventilation. Several fans are placed on the walls of the room at such points as will maintain a constant mixture of the air in the room. Chlorine from a cylinder is metered into the room. On one of the walls of the room is placed a chlorine detector. This detector is so constructed as to collect the chlorine in the atmosphere constantly by a fine spray of fluid which always flows at a constant rate and under a constant pressure. This spray is collected in a small cell made of bakelite, and an electric current is passed through this cell through a delicate ammeter outside the chamber. Variations in the amount of chlorine in this cell alter the electric conductivity of the fluid, and are indicated by variations in the ammeter reading. Having determined the ammeter reading that corresponds to .015 mg./liter in the chamber, it will thereafter be possible for the operator outside the chamber, to release just such quantities of chlorine as will maintain the proper concentration in the chamber as shown by the reading on the ammeter. I am informed that either of these types of equipment can be installed in about one month after it is ordered. The equipment must be specially constructed after the size and characteristics of the room to be used have been ascertained.

Although we are able to state what may be expected from such

a chamber in the treatment of infections of the upper respiratory tract and have already reported such results, we are unable to state with certainty just what prophylactic value such treatment will have. As health officers, you are more interested in the prevention than in the cure of disease. There are numerous considerations which lead me to the belief that such a chamber may have great prophylactic value.

In the first place, the best results in treating cases are secured when patients are treated early. When acute coryza or bronchitis is treated on the first day of the disease, the number of cures is correspondingly higher than when treatment is commenced after the infection has lasted several days. Now it is well known that most of these colds are infections, and that one cold in a household, an office or a factory, is generally followed by others. If the first cases are treated promptly the infection will not spread, thus checking the infection at its source. I have witnessed this in individual cases many times. When the case is treated early, it is unusual for secondary cases to develop.

This prophylactic action would be especially valuable in such a disease as whooping-cough. We have now had several cases in which one of the children of a family had developed a definite case of whooping-cough, while another child in the same family had not yet developed the disease, or had commenced to cough but had not yet developed the typical paroxysms of whooping-cough. Both children having taken the treatment, in several instances we have received reports after several months to the effect that the second child never did develop whooping-cough.

We have had similar results in the treatment of horse influenza at Fort Hoyle, Md., a post adjacent to Edgewood Arsenal. Horse influenza is obviously caused by an organism quite distinct from that causing human influenza. But the pathologic effects and epidemiology of horse influenza are very similar to the human type. The disease becomes epidemic among horses, and hitherto no method of checking it has been known. This disease has appeared among horses at Fort Hoyle twice recently, once last year and once this year. In both instances we have treated the infected horses in a special chamber constructed for this purpose. In both instances, the infected horses have recovered more promptly than would have been expected without treatment, and the epidemic has failed to spread. In the first instance, the initial cases were discovered on February 8. On February 11, other cases developed, and on February 14, there were a total of 41 cases distributed among a number of stables. The entire 41 cases were treated at this time. On February 15, all animals were examined as usual and only 3 cases were discovered. No further cases appeared. This abrupt termination of a disease known to be of an epidemic character, and which had already made a good



beginning among 1000 animals, is considered a strong argument for the prophylactic value of the administration of chlorine.

We have had no opportunity to test the prophylactic effect of chlorine in epidemic human influenza. However, one of the reasons that first caused us to begin this work was the well authenticated report that there were no influenza cases among the operatives of the chlorine plant at Edgewood Arsenal during the great epidemic of 1918, although all other organizations suffered their full share of cases. It seems certain, that should we ever suffer another such epidemic of influenza, that health officers will be called upon to provide chlorine gassing chambers, since no other method of prophylaxis affords any hope at all. By that time, if my expectations are realized, all important cities and hospitals will be provided with chambers. The question of the effectiveness of this method of treatment will undoubtedly be settled within several years. From my own experience I am convinced that the decision of the medical profession will ultimately be favorable.

Should such favorable results be secured in chlorine gassing chambers, the next step would undoubtedly be the application of this method to schools. Wherever people congregate there is an increased danger of the spread of all communicable diseases, especially those in which the infection is received by way of the respiratory tract. In a recent investigation made by Dr. Lazenby of the Maryland Casualty Company, it was found that infections of the respiratory tract formed 30% of the total cases of sickness among the employees of that company. In the Army also, these infections, particularly coryza, bronchitis, influenza and tonsillitis are responsible for higher admission rates than any other disease, not even excepting the venereal infections<sup>2</sup>. I think we may estimate that from a quarter to a third of the diseases that incapacitate school children are infections acquired through the respiratory tract. It is quite practicable, in any school having a ventilating system, to introduce chlorine into the main ventilating duct, in such quantities as will maintain a concentration in the classrooms of .015 mg./liter. This could be done for an hour, 2 or 3 times a week, under the supervision of the school physician.

Diseases spread at school, because so many of them, like whooping-cough, measles and scarlet fever are ushered in by symptoms that appear similar to those of the common cold. Regular attendance is necessary for most children if they are to keep up with their classes, hence few mothers wish to keep their children home for several days because of a little cold. When one of these little colds is whooping-cough or measles, a whole roomful of children are infected before the true nature of the disease is known. Now, were chlorine used as already indicated several times a week, it would probably cure the cases of common cold and prevent its spread; it

might even cure some of the early cases of whooping-cough; it would probably prevent a considerable part of the infections with whooping-cough, measles and scarlet fever. We know that this treatment will not cure cases of measles, which is a general infection, while the action of chlorine is limited to the upper respiratory tract. But after the infection of measles or scarlet fever is received in the respiratory passages of a child, there must be a perceptible interval before this infection can penetrate. If chlorine were administered during this interval, it seems reasonable to suppose that the infection could be eradicated before systemic effects were produced. Let me emphasize that I do not recommend this procedure at this time, but after health officers have become convinced of the value of this method by the treatment of adults in chambers.

Similarly, chlorine could be used in theatres and movies when colds or influenza were prevalent. It could be used for an hour at night in barracks and dormitories. There is also a possibility that this may prove an effective treatment for the carriers of certain diseases where the infecting organisms are located in the nasopharynx. In this connection, one thinks at once of the carriers of such diseases as cerebrospinal meningitis and poliomyelitis. I can do no more than suggest such possibilities, because at present we have absolutely no information as to the value of such a procedure. However, the great possibilities should encourage each health officer to give the method a fair trial. No trial is a fair trial that does not provide for a positive and assured concentration of chlorine closely approximating .015 mg./liter for the hour of exposure, a careful selection of proper cases, and a careful follow up of such cases.

#### References.

1. Vedder and Sawyer. Chlorine as a Therapeutic Agent in Certain Respiratory Diseases, J.A.M.A. March 8, 1924, p. 764.
2. Vedder—The Epidemiology of the Sputum-borne Diseases, etc. The Military Surgeon, February, 1919, XLIV., 123.

\*For the technical actuarial computations in this paper we are indebted to Mr. Papps, whose kindly interest has made it possible to bring to completion what otherwise would have been accomplished only with great difficulty and with many imperfections.

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## HOW DOCTORS DIE.

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### MORTALITY EXPERIENCE OF A NEW JERSEY MEDICAL SOCIETY.

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BY PERCY C. H. PAPPS, Mathematician  
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and  
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Some 43 years ago the Society for the Relief of the Widows and Orphans of Medical Men of New Jersey was founded. The records of the Society have been carefully kept and it has been possible from such records to ascertain the mortality experience. The number of members has not been very great, but since the experience covers a period of 40 years, a fair amount of data was available and it is believed that the experience will be of interest and possibly of some value.

In studying the mortality experience of any group of lives, it is necessary to ascertain correctly, first, the number of lives exposed to the risk of death, and second, the number of deaths resulting. If these two are known, a division of the number of deaths by the number exposed to the risk of dying will give as a quotient the rate of mortality. This rate may be calculated for each age. Unless the number of lives involved is very large, there will not be a sufficient number at each age to give average results. In such a case a different method is used in order to ascertain what the mortality experience has been. A standard mortality table is selected from which the probabilities of dying during each year of life are ascertained. The number of lives exposed to the risk of death in the group to be investigated, which exposures are ascertained for each age, are multiplied by the probabilities of dying as given by the standard table. The products represent the number of deaths which would occur if the mortality in the observed group coincided with that of the standard table. By comparing the actual deaths in the group with the expected deaths according to the standard table, the relative mortality of the group is ascertained.

Any published figures relating to mortality rates should be looked upon with suspicion until the manner in which the rates have been computed has been ascertained. For this reason it seems desirable to set forth as simply as possible the manner in which the mortality experience of the society has been compiled. The lives were observed through integral years dating from the time when each Doctor joined the Society, and the observations were carried up to the anniversaries in 1922 of the dates of joining the Society. The ages of the lives at the date of



entry into the Society were the ages at the birthdays nearest that date.

In computing the time during which the lives were exposed to the risk of death, it is inconvenient to have fractions of years in the final result. If, for example, 3 men retired in the fourth year of membership, and the fractions of a year during which they had been exposed to the risk of death in the fourth years approximated a total of 2 years, 2 of the 3 lives would be counted as retiring at the end of the fourth year and the other life at the end of the third year. This principle was followed except in the case of the deaths, and as is customary in all mortality investigations, those who died were considered as being exposed for a full year of membership in the year in which death occurred. By reason of the manner in which fractional exposures were taken care of where retirements took place in the first year of membership, some few lives were thrown to the beginning of the first year and therefore counted as not exposed.

The extent of the data will be seen from the following table which lists the lives according to the manner in which they pass from observation. A division is also made by years of entry. The table is as follows:

ENTRANTS IN YEARS.					
Mode of Exit	1882-'91	1892-'01	1902-'11	1912-'21	All Years
Cancelled .....	39	43	64	63	209
Existing .....	52	70	148	200	470
Died .....	98	55	23	10	186
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	189	168	235	273	865
Not Exposed ...	2	2	0	0	4
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total .....	191	170	235	273	869

The total exposures were equivalent to 10,742 years of life. Of the 865 lives exposed, 24.2% passed out of existence by withdrawal from the Society; 54.3% were members at the close of the observations; and, 21.5% had died. The average duration of exposure of each of the 865 lives entering into the investigation was 12.4 years.

It must not be forgotten that this is an incomplete experience. At the close of the observations in the year 1922, over 50% of those who had joined the Society were still living. Needless to say, the average duration of the present members will be much increased when the lives of those now living have run their course.

The average age at entrance in the first 10-year period was 39.73 years, in the second 10-year period 38.03 years, in the third period 36.00 years, and in the fourth period 36.41 years. The average age for all years of entry was 37.35 years. The average age at death for all years was 58.35 years. This shows an average duration for those who died, assuming an average age at entry equal to that of all entrants, of an even 21 years.

The expected deaths have been computed according to the United

States Census Life Tables based on white male lives in the State of New Jersey. Expected deaths have also been computed according to the American Men Mortality Table, eliminating the first 5 years of insurance. The latter table represents the most recent experience of American and Canadian Life Insurance Companies on American Male lives. By eliminating the first 5 years of insurance, the major effects of medical selection are avoided. The actual deaths during the 40 years were 85% of the deaths expected according to the Census Table. They were 115% of the insurance experience on American male lives. It is to be expected that Physicians and Surgeons will show a more favorable mortality than that of the general population which includes men in all walks of life and engaged in various occupations, some of which are known to be hazardous. The fact that the mortality experience is above that of insured lives, after eliminating at least to a large extent the effects of medical selection, is probably an indication that Physicians and Surgeons as a class, are subject to a higher mortality than men of similar social standing in other walks of life, by reason of the service they are called upon to render.

A few years ago a very extensive mortality investigation embracing lives insured in the principle companies in the United States and Canada was carried on by a joint Committee of the Association of Life Insurance Medical Directors and the Actuarial Society of America. In connection with this investigation a study was made of the causes of death among standard lives. The deaths were tabulated according to 2 groups of ages but unfortunately these were the ages when insurance was effected instead of ages at death. A tabulation according to ages at death would have been more satisfactory as a basis for comparing the causes of death among members of the Society. To conform with the tabulation of deaths given on pages 27 to 29 of Volume II. of the Report of The Medico-Actuarial Mortality Investigation above referred to, the actual deaths among members of the Society were tabulated according to causes of death and in each of the 3 age groups.

There were 15 deaths among those who entered the Society at ages 15 to 29. A distribution of 15 deaths was made in accordance with the causes of death shown in the table on page 27 of Volume II. of the Medico-Actuarial Report. A comparison of this distribution of 15 deaths with the actual causes of death of the 15 members of the Society who died, would give an idea of the extent to which the deaths among members of the Society coincided with the distribution of the causes of death in a much larger body of standard lives. There were 92 deaths among those who entered the Society at ages 30 to 34, and 79 deaths among those who entered at ages 45 and over. The distribution of 92 and 79 deaths was also made by means of the tables on pages 28 and 29 of the Report to which reference has been made. As the actual deaths were few in number, the distribution of the 15, 92 and 79 deaths were combined so as to show the theoretic distribution of the total of 186

deaths. A comparison of the theoretic or expected distribution of 186 deaths and the actual distribution of the causes of death of the 186 members of the Society who died is shown in the following table:

Cause of Death	Actual Deaths	Expected Deaths
Typhoid .....	4	10.0
Influenza .....	2	2.0
Tuberculosis of Lungs .....	11	18.2
Other varieties of Tuberculosis.....	1	2.0
Cancer .....	13	10.8
Diabetes .....	7	3.0
Other Diseases of Spinal Cord .....	3	.9
Cerebral Hemorrhage and Apoplexy.....	26	14.9
Softening of Brain .....	1	1.0
General Paralysis of Insane .....	1	1.8
Other Diseases of Nervous System .....	2	1.1
Pericarditis and Acute Endocarditis.....	1	1.9
Organic Diseases of the Heart.....	25	14.3
Angina Pectoris .....	7	3.1
Diseases of the Arteries, Atheroma, Aneurism, etc.	5	2.3
Pneumonia .....	23	16.3
Other Diseases of the Respiratory System, Tuberculosis excepted .....	1	1.5
Ulcer of Stomach .....	1	.8
Appendicitis and Typhilitis .....	6	3.2
Cirrhosis of the Liver .....	2	2.7
Nephritis and Bright's Disease.....	25	14.9
Suicide .....	6	6.3
Accident .....	6	13.1
All other causes .....	7	39.9
Total .....	186	186.0

While the number of deaths shown in the above table is not very great, and is perhaps too small to justify drawing any conclusions, it is noticeable that the number of deaths from degenerative diseases is larger than would be expected among standard lives. For example, deaths from diabetes, cerebral hemorrhage and apoplexy, organic diseases of the heart, angina pectoris, nephritis, and Bright's disease are in the aggregate nearly double the expected. From the 5 causes named, the total deaths were 90, whereas the expected deaths from these 5 causes were 50.2. It may also be mentioned that nearly 50% of all the deaths in the Society were from the same 5 causes.

In addition to the data so clearly set forth by Mr. Papps, there are several striking points in this study:

(1.) That practically none of these men have died of contagious disease although they must have repeatedly been exposed to infection. Some, of course, were protected by having suffered from these diseases in childhood, but not all were immune by such exposure, and it is pretty generally admitted now that middle life or even old age does not protect against the contagion of the so-called diseases of childhood unless im-



munity has in some way been obtained. Probably a reasonable explanation might be that the frequent exposures are usually of short duration and are followed by an interval of out-of-door traveling. Note also that notwithstanding the almost universal prevalence of influenza during the epidemic years around 1918, and the somewhat hysterical attempts to curb its spread by quarantine, respiratory shields, etc., only 2 of our deaths are due to this cause, although practically every one of our members must have been frequently exposed.

Few of the deaths were from acute disease, only 37 altogether, and of these pneumonia accounted for 23, again accentuating the oft-repeated opinion that pneumonia, of all the modern diseases, is the one most to be feared.

Our doctors' mortality from pneumonia was much larger than was to be expected, due undoubtedly to the infection occurring when the victim's resistance was lowered by mental and physical fatigue and by exposure to inclement weather conditions. Our deaths from pneumonia were scattered throughout the year, only one month—July, showing no death from this cause. Still, the seasonal influence becomes evident, when we note that of the 23 pneumonia fatalities, 14 occurred during the first 4 months of the year, January and March each showing 4 deaths. These are, of course, the months when pneumonia is most prevalent and our record indicates how fatigue, exposure to bad weather and actual infection from patients seem to combine in producing this high mortality among our members. Also we again confirm the oft-repeated statement that pneumonia is the old man's disease. Our younger members stood the ordeal well. Only 6 died of pneumonia at ages under 50, while the deaths at ages over 51 numbered 17; the periods of 51-55 and over 65 each showing 5 deaths.

Analysis of the deaths by months shows that the winter months are, as might be expected, the hardest for the doctors. January heads the list with 25 deaths and March and August follow with 20 deaths in each month. The three months of January, February and March list the greatest number by seasons—62 in all, and the 3 summer months of June, July and August come next with 52 deaths, indicating that the extremes of heat and cold take their toll of the profession, as of other men. October, November and December find the doctors at their best, only 34 deaths occurring at this season.

(2.) Another interesting consideration is that the earlier members seemed to attain greater age than the later members.

Note the use of the word "seemed". This was used advisedly as the suggestion is in direct contradiction to the modern ideas regarding the duration of life. Of course, as Mr. Papps remarks, this investigation is incomplete, as the majority of our members are still living and the later and younger entrants have not had time to bring up their ages to compare with the older and earlier members. When this is accom-

plished perhaps their span of life will prove as long as that of their predecessors.

The writer earnestly hopes that this will prove true, but he has an uneasy notion that the reverse will be shown and that the modern up-to-date doctor is not physically the tough, hardy product of half a century ago.

Has the breed of man changed? Is the more recent type of physician less resistant to disease? Or has the wear and tear of life, the ever-increasing stress of living in the densely populated New Jersey region, proved more than the medical worker can withstand? One has the suspicion that all of these considerations are factors in our mortality records.

Life was simpler 50 years ago and the physicians of those days had grown up under conditions which tended to develop their own resistance to disease. The medical life then was, in some respects, harder and physically more strenuous than now, but the very severity of that time developed a strong race. The doctor simply *had* to have a good strong body in order to play the game, and also more of his life was spent in the open air than now. The automobile with its quick delivery has displaced the slow going horse, but we pay the price by losing the longer breathing of fresh, sweet air; and also the cities have increased in size and the contaminated urban air is not so fully diluted with the purer air of the open spaces and, moreover, the general character of the doctors' life has changed. Specialism with office and hospital practice has enormously increased, all of which means, for the doctor, more indoor work and less opportunity for breathing fresh outdoor air. Again we pay the price of advancing civilization. So perhaps the breed has changed and we do wear out a little sooner.

(3.) Note the extremely large proportion of those dying of the so-called "Degenerative Diseases". The cardiorenal group has accounted for nearly 50% of all the Society's death claims, which is, as Mr. Papps has stated, nearly double the expected rate, and goes far to justify the common belief that a physician's life is a hard life, and that to withstand the wear and tear of irregular hours, uncertain meals, loss of sleep and the nervous tension of endeavoring to prolong other lives, requires a strong physique, an inheritance of resistance, and a calm and cool nervous control.

Nevertheless, and considering all the punishment to which our members have been subjected, the term of life has apparently not been materially shortened. Of the 186 deaths, 84 were over 61, and 53 of these were over 65 years. In the cardiorenal group, 54 were beyond 61 years and 32 over 65. Taking the average age at entry as 37 years, the life expectancy at that age would be about 30 years, carrying them up to 67 years so that 53 of our dead members practically attained this average, many of them going far beyond it. And be it remembered,

these men were all active workers. The writer can recall very few of this professional group who were idlers in their old age. Practically all died "in the harness", or was it the habit of working, this determination to keep at work that kept them alive? Certainly when the end came they had worn out and did not fail from rust and disuse.

(4.) Observe also, as Mr. Papps has noted, that our experience is not complete and over half of our insured are still living. So that, after longer years and the observing of a greater number of exposures, it seems fair to conclude that our experience has not been unfortunate even from the viewpoint of insurance statistics, and on the other hand, and viewing the Society's results from the humane, friendly and helpful side, there can be no question but that the Society for the Relief of Widows and Orphans of Medical Men of New Jersey has accomplished, and is still carrying on, a work of great value to the profession of this State.

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## **OBSERVATIONS ON FOREIGN BODIES IN THE AIR AND FOOD PASSAGES.**

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FROM THE BRONCHOSCOPIC CLINICS OF THE UNIVERSITY  
AND JEFFERSON HOSPITALS, PHILADELPHIA.

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(Read before the Bergen County Medical Society, at Hackensack, N. J.,  
Dec. 9, 1924.)

The time has passed when the lodgment of a foreign body in the air and food passages is considered as a curiosity of medicine. (McCrae). The monumental work of Chevalier Jackson in his observations on the pathology produced by the lodgment of foreign bodies and his untiring and self-sacrificing efforts not only to develop the greatest skill and highest perfection of technic in their endoscopic removal but to accumulate symptomologic data and develop diagnostic means, have awakened the medical world to the possibility of foreign body as an etiologic factor in disease and its presence a possibility for exculsion in all cases of acute and chronic disease of the lower air passages and of the esophagus. The technic that makes possible bronchoscopy and esophagoscopy without anesthesia, or in cases of bronchoscopy in adults with local anesthesia only, enables both the internist and the surgeon to avail themselves of diagnostic and therapeutic means that are invaluable and permits the removal of foreign bodies through the natural passages without resort to external operation.



In the recognition of the presence of foreign bodies in the air passages by physical signs, Professor Thomas McCrae in his Lumleian Lectures, has given to the profession diagnostic signs which will enable the practitioner to make an accurate diagnosis in a very large percentage of the cases. In the Roentgen ray diagnosis, Dr. Willis F. Manges, by original observation on atelectasis, and by using the phenomena of obstructive and compensatory emphysema, as first described by Iglauer as the basis of study, has developed methods of Roentgen ray study in nonradiopaque foreign bodies that definitely localize them in almost 100% of the cases.

Many cases come to the physician with no history of foreign body accident in which the presence of foreign body should be considered. Of these cases may be mentioned recurrent winter bronchitis in children, pulmonary abscess, tuberculosis, thymic asthma, bronchiectasis, adenopathy, laryngeal stridor, dysphagia, regurgitation, and cyclic vomiting. In cases supposed to have these conditions, we have often found foreign body as the cause of what seemed typical symptoms of these diseases, and its removal at the Bronchoscopic Clinic has cured the patient.

General physical examinations, mirror laryngoscopy, and Roentgen ray studies should be routine procedures in all suspected foreign body cases. The characteristic physical signs of foreign body in the air passages are: the "asthmatoïd wheeze", "audible slap", and palpatory thud (tracheal) of Jackson; the "tracheal flutter" and "limitation of expansion of the affected side" of McCrae; and the physical signs of obstructive emphysema, atelectasis, and drowned lung which arise from the mechanical obstruction to the bronchus by the foreign body and the inflammatory reaction which it produces. The careful consideration of these signs has enabled us on many occasions to make a positive diagnosis of the presence of foreign body which was later confirmed by Roentgen ray studies and bronchoscopic removal of the foreign body.

The Roentgen ray study should include the air and food passages from the nasopharynx to the tuberosities of the ischia. It is only by taking this precaution that the presence of foreign body can be excluded and a negative opinion given. A foreign body that was in the pharynx or esophagus may be regurgitated into the nasopharynx or it may pass downward into the gastro-intestinal tract.

Nonradiopaque foreign bodies may be outlined in some instances by the administration of an opaque mixture, preferably an aqueous solution of bismuth, or, in case of fishbone, a capsule containing bismuth will lodge at the level of the foreign body until it is dissolved. In many instances, the capsule will also stick after the foreign body has been removed owing to the local esophagitis and spasm excited by passage of the capsule, but it will pass on with the first or second subsequent swallow of water. If the foreign body is high

in the cervical esophagus, the capsule may pass by it with only slight hesitation, as was noted in a case in our series.

The practitioner should guard against being misled in his interpretation of the signs and symptoms of foreign body, as a foreign body in the esophagus may produce evidences of respiratory trouble. An esophageal foreign body may produce dyspnea due to tracheal pressure, it may cause retention of secretion in the pharynx, and, with overflow and aspiration of the secretions, tracheobronchitis and aspiration bronchopneumonia may develop, though true lobar pneumonia is exceedingly rare, even in case of foreign body aspiration. The foreign body may, from the inflammatory reaction, produce impairment of the motility of the larynx, and laryngeal stridor may result. In a case in the Clinic, a child, one year of age, on infantile liquid diet chiefly, had no particular difficulty in swallowing, but developed a stridor, which became worse, with increasing dyspnea over a period of 3 months. An otolaryngologist was consulted and advised the removal of adenoids. This was done under ether anesthesia, the child becoming very dyspneic while under the anesthetic. Stridor was not relieved by the removal of the adenoids, and Dr. H. C. Carpenter advised Roentgen ray examination to exclude foreign body. This was done by Dr. H. K. Pancoast and a flat metallic foreign body was found in the cervical esophagus. The removal of the foreign body cured the stridor. Again, an esophageally lodged foreign body may ulcerate through the party wall and the patient develop bronchial symptoms from the leakage.

The first point to be made is that foreign body should always be thought of in case of a sick child, and the second point is, that only by the most careful study of signs and symptoms and the most expert roentgenologic study, with endoscopic examination of both air and food passages, is foreign body to be excluded, and a differential diagnosis made.

The problems of endoscopic removal are many and depend upon the age and size of the patient, the nature and conformation of the foreign body, its position, its location, etc.; and their solution is of the greatest importance in the safe removal of the foreign body. The information about the foreign body itself is best obtained by securing, when possible, a duplicate of the foreign body. The exact localization by physical signs and Roentgen ray study and the duplication of the foreign body by the roentgenologist is also valuable. In order to meet the problems of endoscopic removal, proper equipment is the first essential. The second essential factor is a working team that has been drilled in the proper technic; one man without trained assistants can not do good bronchoscopic work. It is essential that the assistant should be thoroughly trained in all phases of the work, and especially should he have a thorough understanding of the fundamental value of position of the patient and its most

important relation to the problems of endoscopic removal of foreign bodies.

Observations on these cases justify the following conclusions:

1. It is a matter of vital importance to exclude the presence of foreign body in all acute and chronic diseases of the larynx and lungs.

2. Foreign body should be excluded in all cases of the slightest abnormality in swallowing.

3. It is the general practitioner on whom this responsibility first rests. How well he had measured up to this requirement is shown by the fact that in fully 90% of the cases the diagnosis was correctly made before the case was admitted to the Bronchoscopic Clinic.

4. The desirability of personal endoscopic removal without general anesthesia is demonstrated. The use of no anesthesia, or in adults, local anesthesia only, permits coöperation of the patient and guards against the danger of respiratory arrest. General anesthesia would have been very dangerous in the dyspneic cases. Morphin was used as a sedative in patients free from dyspnea.

5. The necessity for teamwork and the importance of the correct position of the patient were amply demonstrated. Without these 2 elements, failure would often have resulted.

*(Dr. Tucker gave a very interesting lantern slide demonstration of cases under examination and treatment).*

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## THE TREATMENT OF CICATRICIAL STENOSIS OF THE ESOPHAGUS BY CONTINUOUS STRING RETROGRADE DILATATION WITH THE AUTHOR'S BOUGIE.

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(Read before the Bergen County Medical Society, at Hackensack, N. J., Dec. 9, 1924.)

Cicatricial Stenosis of the esophagus is due to the formation of scar tissue as part of nature's method of cure in the process of healing lesions of the esophagus. The extent of the scar formed is in proportion to the extent of destruction of the esophageal mucosa by the lesion. The contraction of the scar tissue around the esophageal lumen causes narrowing and, if very extensive, may cause complete stenosis. As the stenosis increases there is obstruction to the passage of food and with the swallowing efforts dilatation occurs above the point of stricture. With dilatation there is food retention and the occurrence of esophagitis; as a result, the inflammatory process produced thereby causes an increase



in the stenosis. We see, then, in cicatricial stenosis, a vicious circle that tends to increase the narrowing. One of our first indications in treatment, therefore, particularly of marked and long standing cases, is to overcome this vicious circle by gastrostomy and put the esophagus at rest, allowing the inflammation to subside.

*The causes of stricture:* Ulcerative processes due to caustic burns are the most frequent cause. Burns from acids, hot substances, trauma, etc., are also causes. Ulcerative lesion due to infectious diseases, either during or following the general infection may result in cicatricial stenosis. Among these may be mentioned, typhoid fever, diphtheria, scarlet fever, and lues. We have recently had at the Clinic 3 cases of post-typhoidal cicatricial stenosis. The patients were young adult males, 16, 18, and 21 years of age respectively, all from the same small town in central West Virginia. Parenthetically I may say that these cases have been cured by the retrograde method of using the author's bougie.

The cause of the greatest number of cases of cicatricial stenosis is the accidental swallowing of solutions of household preparation of caustic alkali. The accidents are all preventable, being due entirely to carelessness or ignorance of the sinister nature of these dangerous preparations. Here we have an excellent opportunity for prophylaxis and here, as in all diseases, an ounce of prevention is worth many pounds of cure. You are all more or less familiar with Dr. Jackson's efforts, supported by the American Medical Association, to procure legislation compelling manufacturers to clearly and distinctly label such preparation as poison, so that they will be treated as poisons when they enter the kitchens of every home. It is the duty of every physician to give his support, through his representatives in Congress, to the furthering of this legislation which is being sponsored by Senator George Wharton Pepper of Pennsylvania.

*Methods of Treatment:* At the Bronchoscopic Clinic we use 2 methods of treatment of cicatricial stenosis of the esophagus. In the cases where there is only a mild degree of stenosis, where the difficulty in swallowing is for solids only, where there are no attacks of complete stoppage and the patient's nutrition is amply maintained by mouth feeding, we use *peroral esophagoscopy bouginage*. In this method the stricture is exposed by means of the Jackson esophagoscope and by direct vision, and the steel-stemmed filiform bougies of Jackson are used in increasing sizes to dilate the stricture. Blind methods of bouginage are never used. As dilatation progresses and the stricture is cured, the smaller size esophagoscope is passed through the strictured area under direct vision; and thus dilatation to the normal lumen is effected. The second method of treatment is by retrograde dilatation by the continuous string method with the author's bougie. This method is used in cases where there is narrowing of the esophageal lumen to such an extent that there is great difficulty in swallowing liquids and the patient's nutrition suffers, or in cases where all other methods have failed to effect a cure.

This method is a modification of the method of Ochsner of pulling upward from below a rubber tube, that of Eiselberg of pulling up soft rubber catheters, and of other retrograde methods of treatment. We believe it is an improvement both in technic and in the bougie, being safer and more certain of cure than the methods formerly used. The first step in this method of treatment, as in all retrograde methods, is gastrostomy. The extent of the lesion in the esophagus is determined by first, the amount of difficulty in swallowing, and by the patient's general condition; second, by the roentgenologic examination of the esophagus and the peroral esophagoscopic study. By means of the gastrostomy, the patient's nutrition is maintained and the esophagus is put at rest; the vicious circle above mentioned due to retention of food in the strictured esophagus with its tendency to increase of stenosis, is thus avoided. The next step is the placing of the continuous string through the strictured esophagus. After gastrostomy, even in patient's who have been unable to swallow their saliva, the stricture opens up, due to the rest given the esophagus; and they are frequently able to swallow water freely. In these cases, a fine twisted silk thread (number 15 buttonhole twist), is swallowed. We have been most successful by allowing the patient to swallow the frayed end of the thread, washing it through with small quantities of water. In small children this can be accomplished by passing the thread through the nose and nasopharynx and out through the mouth to a length of 6 to 8 inches; the end is then swallowed and, as it passes up through the nasopharynx, the child is prevented from chewing off the thread. As the end of the thread is swallowed, additional length is passed in through the nose, or mouth, as the case may be, until sufficient length has been swallowed to allow it to pass through the stomach and pylorus. Then, by means of the Jackson pillar retractor, a loop of the thread is caught through the gastrostomy wound from the lesser curvature of the stomach where it extends through and withdrawn through the gastrostomy fistula, pulling the thread downward through the esophagus. The side of the loop toward the pylorus is cut and the lower end of the string, through the esophagus, is attached to the upper end which is out through the mouth, or nose as the case may be, and we have in position the continuous string. A heavier string is carried through before dilatation with the bougie is carried out. The continuous string is cut and a number 13 surgeon's twisted silk is attached to the lower end and is pulled upward through the esophagus, replacing the smaller thread and is thereafter used as the continuous string. Where the patient can not swallow the thread a string may be placed in the esophagus by retrograde gastro-esophagoscopy. A retrograde esophagoscope is introduced through the gastrostomy wound and carried up through the hiatus esophagus; a small size Jackson steel-stemmed filiform bougie is passed by sight through the lower opening of the stricture and carried upward through the stricture, out the mouth, and a string being attached to the tip is pulled down and out through the gas-

trostomy wound; in this manner, placing the continuous string. The greatest difficulty in this procedure is the difficulty in finding the hiatus esophagus from the stomach. Even by the use of ballooning methods in the stomach it may be necessary to try several times before success is attained in finding the hiatus. Where there is complete atresia in the esophagus, we have on several occasions been successful in passing a string through the occluded esophagus by a combined peroral and retrograde esophagoscopy method using the double-planed fluoroscope as a guide. This necessarily is a very dangerous procedure if the utmost caution is not used.

After the continuous string is in position and the gastrostomy wound is sufficiently healed, we are ready to start dilatation with the retrograde bougie. The smallest size is drawn upward first, at the same time drawing through by attaching above the bougie on the lower end of the old string a new string, which becomes the continuous string which is worn at all times by the patient. Great care is exercised at all times in the stepping up of the bougie sizes lest rupture of the esophagus occur from over-stretching. Treatments are carried out once or twice a week, depending on the reaction to treatment. Bougie sizes are not increased until the size in use goes through without resistance. The patient's nutrition is maintained by gastrostomy feeding which must contain all the essential elements of a full diet. After the dilatation of the esophagus has reached a 20 to 24 bougie size, tube feeding can usually be discontinued. The tube is worn for at least six months after the largest size bougie is carried through the esophagus, as an emergency precaution. The gastrostomy wound can always be closed, but it is much better to leave it open than to close it too soon when there is a possibility of recurring stenosis.

#### Conclusions Based on Treatment of Over 100 Cases.

1. The great truth pointed out by Trousseau, that sooner or later all cases of esophageal stricture died of the bougie is a clear indication of the dangers attending the blind pushing downward of peroral bougies.
2. Esophagoscopy bouginage of cicatricial stenosis is relatively safe in careful hands, but its results are obtained slowly, especially in cases of multiple, eccentric strictures which have to be dealt with carefully and one at a time.
3. Rapid instrumental dilatation of cicatricial, esophageal stenosis is dangerous.
4. It requires no argument to demonstrate that drawing a bougie through a strictured esophagus by a string which the bougie must follow is incomparably safer than pushing any bougie could possibly be. The only possible danger would arise from the mistake of violently pulling through an oversized bougie.
5. It is true that retrograde treatment requires a gastrostomy, but this is a relatively minor operation that can be done quickly and, if nec-



essary, under local anesthesia. Moreover, the giving of all food by mouth being stopped, the esophagus is relieved from the static esophagitis which is so often a factor in increasing the amount of cicatricial tissue, the subsequent contraction of which renders the stricture more and more difficult to cure.

6. Though esophagoscopy is always advisable for determination of the condition of the esophagus before beginning treatment, once the endless string is in place, neither retrograde nor peroral esophagoscopy is necessary. It can, therefore, be carried on to complete cure by any careful practitioner.

7. With the bougie here shown, treatment of cicatricial stenosis of the esophagus is, I think, safer than by any other method and the curative results are obtained more quickly than by any other justifiable method.

8. Hospitalization is not usually required except for gastrostomy in cases in which this operation has not already been done. The string is worn through the nose without annoyance and children can attend school if it is so desired.

*(The construction of the bougie and the technic of string swallowing and demonstration of retrograde bouginage was shown by slides and moving pictures).*

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### In Memoriam.

Resolutions adopted by the Board of Trustees of the Medical Society of New Jersey upon the death of Dr. Philander A. Harris.

Whereas: In the death of Philander A. Harris, the medical profession has incurred a loss that will be long felt, and a vacancy which will be difficult to fill.

Dr. Harris, a former President of the Medical Society of New Jersey and a member of the Board of Trustees, was endowed with an energy, persistency and constancy in the prosecution of his chosen profession that defied and overcame all obstacles, and a mechanical ability marvelous in its attention to detail. This, added to his skill and anatomic knowledge, aided him in becoming the skillful surgeon that he was. No detail in the prosecution of his work, however insignificant in itself, was ever ignored.

During an active practice, which he was permitted to carry on until a short period before his demise, he assisted the advance of medicine by his writings and suggestions, involving the best methods of approach toward the perfection of all surgical procedures and technic. His activities were not limited to his home town, but were known and appreciated by the members of the surgical profession throughout the United States. He was recognized and respected as one of the leading Gynecologists.

Therefore: Be it resolved, that the Medical Profession of the State of New Jersey deeply regrets the cessation by death of so useful a life, that we mourn his loss, and that we extend our heartfelt sympathy to his family in this, his great bereavement.

Be it further resolved: That a copy of these resolutions be transmitted to his family.

Signed for the Trustees:

G. K. Dickinson, M.D.

Edward J. Ill, M.D.

Walter B. Johnson, M.D., Chm.

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NOTE.—The transaction of business will be expedited, and prompt attention secured if.—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

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## PRIDE IN OUR REPORTERS.

Our appeal for coöperation on the part of our reporters of County Medical Societies, published in the December Journal, has met with such a satisfactory response that we would take advantage of this opportunity to express our appreciation and thanks. In the January issue, we published the proceedings of all but one of the county meetings held during the month of December (and that single failure seems to have been unavoidable) and now, in the February issue, we are able to present a report of *every* meeting held during the month of January. It is scarcely to be hoped that we shall maintain so perfect a record throughout all the months, but let us try; let us see for how many consecutive months we can make a "strike". If we could make a clean score this month, there is really no good reason why we should not do it regularly.

We are particularly pleased, however, not so much at having received the full number of reports as, and this is far more important, with the fact that the reporting was so well done; several of these reports present material of quite as much value to the members of the profession as anything that appears under the heading of "Original Articles". If you have not been doing so, get into the habit now of reading these County Society Reports for there is a scientific as well as a news value in what is being thus presented.

## ORIGINAL ARTICLES.

We are exceptionally fortunate this month in our presentation of original articles; a series of five first-class productions does not fall to our lot every month. First, perhaps, we should mention Dr. Bryant's paper on "Periodic Health Examinations", a subject in which the profession is today showing the keenest interest presented by one who might almost be called the father of the plan; secondly, Colonel Vedder gives us his latest views on the subject of Chlorine Gas in the treatment of

respiratory tract infections and discusses the technic for employing his methods of treatment; Tucker, out of his rich experience in association with that wizard of bronchoscopy, Chevalier Jackson, sets forth the newest work in handling of foreign bodies and strictures in the respiratory and esophageal channels; and, finally, one of our own distinguished members, Dr. Bennett, gives us a most interesting account of what ultimately happens to members of the profession—our chances of living as compared to those of persons engaged in other occupations. Your attention is respectfully called to the fact that each of these papers is deserving of your careful consideration.

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#### JOURNAL EXPERIMENTS.

In the last number of the Journal we inaugurated a plan to serve in some measure as a postgraduate reading course, in lieu of the old method of publishing incoördinated abstracts from medical literature, and requested that members express their opinions as to the value and usefulness of such material. Up to the present time, this new feature has received nothing but commendation, but we wish there might have been a more general expression of opinion; altogether too small a percentage of our membres have commented upon this matter. Perhaps we are unwise to invite criticism and it might be a display of better judgment to "let sleeping dogs rest undisturbed", but, as we have remarked before, this is "your Journal", and as we are anxious to make it measure up to your needs and requirements, it is desirable that you should express yourselves regarding its contents; so, once again, we call your attention especially to the column headed "Observations from the Light House" and request that you read it this month and tell us what you think of the scheme—whether you approve or disapprove in general and whether you would suggest any means by which it might be improved.

The very first response to these "observations" was a communication from one of our younger members whose attention had been attracted by the reported latest discovery in the realm of Urology and, having been unable to find in his town the new drug recommended, he requested us to secure information as to how it might be obtained. We got in touch with the scientist whose experimental work had been referred to and were able to secure some of this chemical direct from the laboratory, for the doctor's use. Now, that is service, in fact, not merely in theory. It is our conception of this office that it should be of real service to every member of the Society, not merely a place for the reception and revision of manuscripts but, in addition, a place for the procurement and distribution of information of service to the Society members.

We hope to make this special column helpful to others; in fact, we feel certain that it will prove helpful and that the scheme contains great possibilities if you will make use of it. Do not hesitate to ask questions of the Editor, lest you should be troubling him; that is what he is employed for.



## PERIODIC HEALTH EXAMINATIONS.

No other question before the medical profession today is attracting so wide-spread attention and such thoughtful consideration as that of Periodic Health Examinations, and it is quite proper and desirable that this should be true. From whatsoever angle the question is viewed, it looms up as a matter of very great importance to the medical man. Always recognizing the fact that one of our chief functions is to heal the sick, we have never quite lost sight of the other equally important fact that there is an obligation upon us to keep people from getting sick; not a legal obligation but an assumed one, and that is the sort of obligation that weighs most heavily with us all. That truth is well exemplified in the tremendous amount of work the profession has performed in the way of preventive medicine. Nothing could be more natural, therefore, than that in the due course of evolution the profession should come to devoting its energies toward teaching the individual how best to protect himself against the natural and inevitable processes of decay as well as against the unnatural and often unnecessary attacks of the enemies to his well being.

From one end of this country to the other the profession is today considering what part it shall take as an organized body, and what part individual members shall take in this work. That some organized, systematized and coördinated scheme shall be put into effect seems desirable and yet there is no occasion for any particularly elaborate plan in order to accomplish what is hoped for. The end to be attained is easily understood, and the means of attainment would seem to be comparatively simple. When we purchase a piece of machinery, a fine automobile, for instance, we try to make sure at once that it is in perfect working condition and then, throughout the period of our ownership, we have that machine periodically overhauled to make certain that its parts are still in good order, that no screws are loose nor bearings unduly worn, and, if anything is found to be out of order we take steps at once to have that part repaired; one does not wait, not if he is wise, until something breaks before giving thought to the perfect working condition of his machine. It is that same principle which it is proposed to apply to the human machinery, and certainly our own bodies are to most of us our most valuable possessions and deserving of as much consideration and attention as our automobile. A preliminary, thorough and complete examination to ascertain whether or not our bodily machine is in perfect order, and then, periodic examinations, annually or more frequently as may seem advisable in individual cases, to make sure that everything is running smoothly or, if not, what repairs are needed.

The problem would seem to be so simple that one would naturally have been following this course all his life, and yet, how many physicians, even, take such care of themselves, to say nothing of being called upon

for or of applying such practice to the care of their personal followers? We do not know the truth of the assertion but have many times heard it said that the "Chinese pay their physicians so long as they keep them well", and, invariably that statement has brought forth a laugh of derision from the audience. If the statement be true, the custom has existed in China for centuries and we with our much vaunted "civilization" are just coming to acknowledge that the "heathen Chinese" has been right all the time.

But, not to wander too far afield, periodic health examinations are about to become the custom, let us hope not the fad, of the day and it would seem to be well for the profession to give serious thought to this question in order that the public may be properly guided in this matter by those who should know best what this innovation calls for. Dr. Bryant, in his very interesting paper published in this issue of the Journal, tells us what has been and is being done in other parts of the country and, profiting by these experiences, the officers of the State Medical Society of New Jersey are preparing material to lay before the members of the Society at an early date, with the idea of developing uniformity in the disposition of this problem in this State. In the mean time, it might not be amiss for each member of the Society to submit himself to one of his confrères for a personal examination; first, in order to safeguard his own health; secondly, to acquaint himself with the problem as it will soon be presented to him by his more intelligent patients.

In that connection, we would respectfully call your attention to Dr. Bennett's paper, in this number of the Journal, referring to the number of deaths and the causes thereof among physicians of this State during the past few years; a report showing that the number of deaths resulting from such diseases as diabetes, nephritis, and organic heart affections was among physicians nearly double the expectancy for men in general, according to the statistics of life insurance companies. That picture suggests that physicians are not prone to take proper care of themselves.

If we are going to preach this doctrine, and we are personally heartily in favor of doing so, let us commence by submitting ourselves to the examination and at once protect ourselves by receiving its benefits. The probabilities are that the majority of us will find one or more slight abnormalities that require remedying but it is much better to ascertain that fact, if any trouble does exist, in order that it may be corrected before it reaches an irremediable stage. We, editorially, can speak from experience in this matter, having been forced by circumstances to adopt the policy several years ago and we can assure those of you who have not yet done so that you will find it decidedly advantageous to adopt the plan of periodic examinations for yourself before taking up the project of advising your patients to do so; recalling a phrase that was popular during the world war, "it is good for what ails you".



## Observations from the Lighthouse

Lest some of our members may have overlooked the announcement last month, concerning the establishment of this column and the reasons for doing so, we deem it wise to repeat here that introductory paragraph from the January Journal:

"Abandoning the old practice of presenting scattered abstracts upon a variety of unrelated subjects, we propose to try the experiment of establishing here a column comparable in some degree to the weekly review of general topics in the Literary Digest, a column in which we may present sketchy references to some of the most important scientific medical developments of the preceding month as reported through original articles in leading medical periodicals. We shall be able to deal with but a few topics each month, and shall not attempt to discourse extensively upon any subject; the object will be rather, to stimulate interest in what might be called a system of postgraduate reading. Subjects selected for consideration will be of a practical nature and, in so far as possible, of general interest, and the references given will be intended to lead the reader to investigate further on his own account. If any reader should find himself sufficiently interested in any subject discussed to desire further information, we shall be very glad to try to furnish an enlarged bibliography upon that question, and, if he wishes to procure abstracts of the original article quoted, or access to the complete original, we can put him in the way of securing that material promptly and at the minimum of labor and expense."

### The Study of Pathology.

When the Southern Medical Association decided last year to organize a new department, the Section on Pathology, Dr. MacCallum, of the Johns Hopkins University Medical School, was invited to deliver the address at the opening session. Instead of following the usual course of delivering a flattering address relating to their embarkation upon a new field of labor, the speaker told them some wholesome truths (Southern Med. Jour., 17:823, Nov., 1924.) about the preceding neglect, on the part of the whole profession, of this fundamentally important branch of medicine, and pointed out the fact that all really great clinicians have been primarily good pathologic anatomists, emphasizing his belief that it is inconceivable that a man can become a great clinician except through being able to visualize constantly the changes which may take place in the internal organs and to recognize at once those which do present themselves to his view. The primary need of the day is control of opinions formed through clinical methods, by a study of autopsies and of the material removed at surgical operations. There has been far too great a tendency in recent years to depend upon clinical study for information regarding the patient, instead of studying the autopsy material to learn what actually happens to the tissues in disease. The explanation so frequently heard, that it is difficult or impossible to get permission for the performance of autopsies, is scarcely deserving of the attention usually given it; the physician who really wants an autopsy can usually persuade the

family to permit it, and he will seldom have to exert more persuasive eloquence for this purpose than he is accustomed to use when advising a major operation.

### The Treatment of Obesity.

While many physicians do not regard obesity as a disease, all will admit that it is in many instances a troublesome condition to deal with and that superfluous fat not only interferes with the general comfort of its bearer but under its influence the heart muscle sometimes degenerates and mediastinal and subdiaphragmatic masses of fat cause serious dyspnea. In some cases there is, also, to contend with a condition of adiposalgia. In a recent communication, (Ugeskr. f. Laeger, Copenhagen, 86:762, Oct. 9, 1924.) Folkmar reports an interesting study on the basal metabolism of 21 adipose patients in the hospital, showing that in every case there was a diminution of from 3 to 20% in the metabolic rate. The lowest pulse rate taken during the experiment was always more rapid than the lowest observed in that patient at other times. This is of importance because it has been generally observed that the pulse rate runs parallel with the more or less complete rest of the adipose patient. Although the adipose individual eats more than he can use, he may be really eating but very little. As regards treatment, Folkmar suggests that it is unsafe to increase the loss of heat so we must increase metabolism, at the same time giving as little food as possible. A direction to the patient to use his muscles may be enough in the slighter degrees of fatty disease, if he is intelligent and energetic; but often this increases his hunger and upsets the balance between food taken and food burned-up. In the more advanced stages, the patient's energy is usually not sufficient and it is rather unfair to compel a person with atrophic muscles and cardiac insufficiency to take excessive muscular exercise, inasmuch as the power of getting rid of the heat produced is also diminished. The only other course open is to diminish the deposition of fat by limiting the diet, but this is usually not enough of itself, and one may be compelled, at any rate in the beginning, to use a thyroid preparation which is known to be able to raise the basal metabolism to the normal height or even higher. It is therefore necessary; (1) to give a thyroid preparation, (2) to reduce the amount of food taken and (3) cautiously to train up the patient's muscles and heart.

Mason (Canad. M. A. J., Montreal, 14:1052, Nov., 1924.) presents an excellent article along these same lines but dealing in greater detail with the question of treatment, especially as it relates to the relation between diet and heat production.

### Diabetes Mellitus.

The medical literary output of the past few months has been rich in articles dealing with the many phases of diabetes. Banting's work has led to a restudy of this interesting disease and the extent of its ramification and associations is rather surprising when one's attention is first called to that aspect of the problem. For instance, Patrick (Brit. Med. Jour., p. 802, Nov. 1, 1924.) reports a case of acute diabetes following two weeks after an attack of mumps, in a girl 8 years of age, and running a rapid course to death within 3 weeks despite the



most energetic treatment. Although symptoms of pancreatitis are relatively common in the course of mumps, glycosuria and diabetes have rarely been reported. Spencer reports (J. A. M. A., 83:1428, Nov. 1, 1924.) a case of membranous dysmenorrhea in a 40 years old married woman whose menstrual troubles disappeared upon the discovery and proper treatment of an existing diabetes. In the same Journal, Machlis relates the history of a curious case of diabetes complicated by xanthoma and by lipemia retinalis; the ophthalmoscope revealed normal disks and none of the usual signs of diabetes retinalis, but the retinal vessels were shiny white in appearance and, although the patient was virtually amaurotic when he came out of his attack of coma, the lipemia disappeared and normal vision returned after a course of insulin treatment. The skin lesions, also, disappeared in the course of a month, leaving only rosy macules in the place of scaly, easily bleeding papules that had covered the flexor surfaces of the legs and arms and in the groins.

The value of the glucose tolerance test in the diagnosis of diabetes is ably presented by Henry J. John (Jour. Metabolic Research. 4:255, Sept.-Oct., 1923) in the report of a second series of estimations upon 100 consecutive cases, the findings practically coinciding with those reported in his first series. In nondiabetics the maximum increase in blood sugar concentration appears very promptly after ingestion of glucose; in diabetics this rise occurs very slowly and the return to normal is slow. The absolute height of blood sugar percentage after ingestion of glucose is of less importance, apparently, than the time required in effecting the change and for reestablishing the normal level. If, after ingestion of 100 gm. glucose, the curve comes back to normal level within 3 hours, the individual is considered to be non-diabetic; if more than 3 hours is required, he is considered diabetic; those cases in which the return to normal hovers about the 3 hour period are considered as prediabetic. The timely discovery of this last group is the most important issue in the whole problem, since, by means of preventive medicine, such patients can be kept in this prediabetic state.

The glucose tolerance test is indispensable in cases of spasmodic or persistent glycosuria, and in cases showing only slightly elevated fasting blood sugar; in obesity cases, also, it will unmistakably demonstrate the lagging carbohydrate utilization. There is no fixed normal renal threshold for all individuals; each person is a law unto himself and the individual threshold may change in untreated diabetes.

The diagnostic importance of the glucose hyperglycemia test is further attested by Marcel Labbé (Bull. Acad. de méd., Paris, 92:1030, Oct. 21, 1924.) who describes a method of plotting the test results in a schematic form.

The glycemia of the patient is measured while he is in a fasting condition, after which 50 gm. of pure glucose dissolved in water is administered and a quantitative analysis of blood sugar is made every half-hour for the next 3 to 5 hours by Bang's micro-method, glycosuria being measured at the same time. The results are plotted out in such manner that 1 cm. of the ordinates represents 1 gm. of sugar in the blood, and 1 cm. of the abscissas represents one hour of the reaction. The curve has approximately the shape of a triangle, the area

of which expresses accurately the results of the test. In normal cases this area measures 0.20 to 0.40 sq. cm., and it is much increased in diabetes (2 to 7 sq. cm.).

In the matter of dietetic treatment, a somewhat novel suggestion is made by Mahler and Pasterny, (Wien. Arch. f. inn. Med., 9:83, Oct. 15, 1924.) to the effect that the roast products of rice, flour and potatoes constitute a valuable addition to the group of carbohydrates that may be permitted to diabetics even in large amounts, because they produce less glycosuria than do the materials from which they originate, and in severe cases they can be covered correspondingly more easily by insulin.

Degrez, Bierry and Rathery indicate the belief (Presse méd., Paris, 32:869, Nov. 5, 1924.) that the ideal ration in a case of diabetes is one that contains enough proteins to maintain a quantitative and qualitative equilibrium between the nitrogen intake and output; the maximum quantity of carbohydrates tolerated by the patient must be given, the ration being supplemented by fats in suitable proportions so as not to exceed that which does not produce acetoneuria or only a moderate degree thereof. The whole ration, moreover, must supply an adequate quantity of calories. In opposition both to physicians who advocate a very strict limitation of fats in the diet of diabetic patients, and to those who, on the other hand, give large quantities of fats with an extremely small proportion of proteins, these authors hold that a diet which is well balanced as regards its various elements can alone be satisfactory in the simple or grave forms of diabetes, although in the latter a relatively small proportion of fats is generally needed.

### Insulin.

Naturally, insulin forms the basis of thought in a large series of papers relating to diabetes. C. H. Best, who has been, we believe, associated with Banting from the beginning of his work in this field, presents a report on the recent work in the manufacture of insulin, (Endocrinology, 8:617, Sept., 1924.). Chief among the improvements in its manufacture during the 2½ years in which the drug has been available are the substitution of alcoholic for watery extracts of pancreas, precipitation of the active principle by means of picric acid and subsequent liberation of insulin in the form of the hydrochlorid by treatment with hydrochloric acid in 75% alcohol. Some investigators have claimed to obtain the best results when the frozen pancreas is extracted with alcohol, but Best has obtained the most satisfactory results through extraction by acid alcohol. For testing insulin, the Toronto University Insulin Committee uses rabbits, the unit being one-third of the amount necessary to lower the blood sugar of a 2000 gm. rabbit starved for 24 hours, from normal to 0.045% over a period of 5 hours. A stable insulin hydrochlorid is being prepared by the Medical Research Council of Great Britain, which may eventually become the official standard. Great variations in the yield of insulin have been reported by different workers, due in part to differences in the method of testing, partly to the varying degrees of purity of the material under test, and partly to the amount of insulin actually extracted. The yield is best stated in terms of units of the finished prod-

uct. It is interesting to note that insulin has been proved to be present in certain plant juices, notably beets, but the supply from such sources must be very small.

Leaving aside for the moment consideration of the real value of insulin, that is its use in the treatment of diabetes, it is interesting to observe the efforts being made to utilize this drug in the treatment of other conditions. Hirschfelder and Maxwell, (Am. J. Physiol., Nov. 1, 1924.) arguing that in as much as injections of insulin cause an increased oxidation of glucose, and that injections of glucose will cut short the convulsions produced by injections of insulin, concluded that it would be interesting to test the effect of insulin upon the course of intoxications by alcohol and acetone. Rabbits were injected with 50% alcohol by stomach tube, and after somnolence or coma had been induced the animals were given insulin. The results, however, show no striking differences between animals that received insulin and those that did not; and 2 animals which had been given insulin subcutaneously until convulsions were produced, received doses of 20% alcohol intravenously without influencing the course of the convulsions.

Having observed that the marked symptoms of depression often shown by diabetic children could be favorably influenced by the administration of insulin, it occurred to some investigators to study the effect of insulin upon conditions of true mental depression. Cowie, Parsons and Raphael, (Arch. Neurol. & Psychiat., 12:522, Nov., 1924.) show that there is a disturbance of the normal utilization of glucose in manic-depressive psychosis; in the depressive phase there is a delayed utilization of glucose comparable to that obtained in diabetes mellitus, while in the agitational phase the glucose utilization curve is flat or has a tendency to fall below that of a normal person. Their investigations show the effect of insulin on glucose absorption and utilization in the depressive phase of manic-depressive psychosis: (1) The characteristic glucose utilization curve of the depressed phase of manic-depressive psychosis is made to conform to that of a normal person or is completely flattened out, or is made to approximate that of the agitational phase by the subcutaneous injection of insulin. (2) The amount of insulin necessary to accomplish this effect varies with the clinical status of the patient. (3) There seems to be evidence that the degree of depression may be measured by the amount of insulin necessary to bring the glucose utilization curve to that of a normal person. (4) The amount of insulin necessary to bring the curve to normal is a measure of the factors opposing the utilization of glucose.

The possible effect of insulin upon patients whose diabetes complicates or is complicated by tuberculosis is the subject of a paper by Margolis, (Polska gaz. lek., Cracow, 3:632, Oct. 26, 1924.) who calls attention to the fact that the only mixed cases of this kind that can be safely treated with insulin are those in which the pulmonary changes are slight. In the more serious cases the insulin may cause an improvement in the diabetic condition but the tuberculosis seems rather to be aggravated and Margolis reports unfavorable experiences in 3 out of 4 of such mixed cases; 2 of his patients died of pulmonary hemorrhages and the third

showed severe reaction in a marked increase of temperature; in only 1 case, where the lung changes were slight, was there no injury from the insulin. He believes that cases with slight involvement of the lungs may accept small doses of insulin but they should be carefully watched for untoward symptoms.

## In Lighter Vein

### Confidence!

The importance of the votes which parties, parliaments, and political bodies make so much fuss over giving to a man shrinks to nothing in our mind every time we stop to watch one laborer holding a steel wedge in his hand while his playmate whales it with a sledge.—Life.

**Business Is Business.**—A clergyman was conducting a funeral in a Western State when two shots were fired outside the church. The undertaker at once rushed out, but returned in a few moments, smiling.

"I've secured both these customers," he whispered to the parson with pardonable pride.  
—The American Legion Weekly.

**Instalments Everywhere.**—"Ed's buying an automobile on the instalment plan."

"Yes, and if he doesn't drive more carefully than he has been doing, they'll take him to the hospital on the same plan."—Kansas City Star.

**Mac**—I'm smoking a terrible lot of cigars lately!

**Jack**—You certainly are, if that's one of them!—Columbia Jester.

**Wise Man.**—We see the Rev. Mr. Hight hopes to prove his "mental derangement" by showing that he once bit a mule on the nose. My husband, who is an ex-army man, says the fact that he bit the mule at that end proves his sanity.—Ettabug in the Chicago Tribune.

"How d'ja lose your hair?"

"Worry."

"What d'ja worry about?"

"Losin' my hair."—Amherst Lord Jeff.

**As you were.**—"Clarence," she called. He stopt the car and looked around.

"I am not accustomed to call my chauffeurs by their first name, Clarence. What is your surname?"

"Darling, madam."

"Drive on, Clarence."—The Daily News.

**How about It?**—Husband—"Didn't I telegraph you not to bring your mother with you?"

Wife—"That's what she wants to see you about."—Holmes Store News.

**Their Poor Choice.**—Pearl—"Mamma, if I get married, will I have a husband like papa?"

Mother—"Yes, dear."

Pearl—"An' if I don't marry, must I be an old maid like Aunt Jane?"

Mother—"Yes, dear."

Pearl—"Mamma, we women don't get many chances in this world, do we?"—The Sydney Bulletin.



## County Society Reports

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The stated monthly meeting of the Atlantic County Medical Society was held at the Hotel Chalfonte Friday, January 9, 1925, at 8:30 p. m. The meeting was called to order by the President, Dr. D. Ward Scanlan. The minutes of the previous meeting were read and sanctioned.

Dr. Clarence L. Andrews has been appointed by the American Medical Association to act as chairman on the local committee of arrangements for the annual meeting to be held in Atlantic City, May 25 to 29, 1925. Assisting him are: Drs. H. T. Harvey, secretary; E. H. Harvey, treasurer; with an advisory committee consisting of Philip Marvel Sr., W. B. Conaway and W. E. Darnall. Dr. Andrews appointed the following chairmen to head the succeeding subcommittees: W. B. Stewart, Finance; W. P. Conaway, Entertainment; D. B. Allman, Hotel; W. J. Carrington, Hall and Meeting Places; S. Stern, Scientific Exhibits; D. W. Scanlan, Registration; P. Marvel Jr., Section Work; R. Bew, Diagnostic Clinic; I. Leonard, Commercial Exhibits; C. Charlton, Reception; T. Beckwith, First Aid; J. H. Marcus, Printing; S. Barbash, Section Entertainment; W. Clark, Alumni and Fraternal; E. Uzzell, Program; B. Davis, Information; J. Poland, Telegraph and Telephone; H. Davidson, Badges; C. Bartlett, Women Physicians.

It was moved by Dr. Conaway, and properly seconded, that the Atlantic County Medical Society endorse the action of the American Medical Association in naming Dr. C. L. Andrews as chairman of the committee on local arrangements, and the motion was adopted.

As part of the program of the February meeting will be presented by Dr. Ivy, it was decided that the members of the dental profession be especially invited to attend the next meeting.

The first half of the Scientific Program was presented by Dr. George Muller, clinical professor of surgery, at the University of Pennsylvania. His topic was the Diagnosis of Certain Phases of Gall-Bladder Disease. After a very lucid description of the anatomic features, the nerve supply and the physiology of the gall-bladder and biliary passages, he stated that stones demonstrated but an incidental feature of gall-bladder trouble, causing injury and symptoms from plugging of the ducts. The common conception of cause is an infection, but it has been suggested that the formation of the single stone is not brought about by an infection but through a disturbance in the metabolism and that the soft concretions are due to bile stasis. Dr. Muller further stated that the faceted stones are not due to pressure from one another, but that they are formed at one time and take this shape from the manner of crystallization.

Dr. Alvarez of California, in a recent analysis of a series of cases, demonstrated an average interval of 19 years from the probable time of involvement to the time of operation. The first stage of gall-bladder disease occurs in the third part of life and as a rule pursues a mild course while these stones are in process of crystallization, and no acute symptoms appear

until the cystic duct is obstructed. The inaugural symptoms are reflected to the stomach and are manifested by pylorospasm, belching, pyrosis, nausea, and vomiting. Pancoast states that a clear duodenal ulcer rarely causes pylorospasm. The toxic symptoms are: (a) Local; tenderness under the costal margin; (b) remote; arthritic pains not unlike arteriosclerosis of heart manifestations. Second stage is instituted by the addition of more stones and with the typical symptoms of colic, but with an absence of jaundice at this time. During this stage the gastric symptoms are more marked and attacks occur mostly at night. The third stage is more or less demonstrable in the aged, at which time we recognize gangrene and empyema with stone formations and pancreatitis. Commenting upon the remote symptoms during the first stage, he cautioned the physician to properly interpret the remote toxic symptoms; extrasystole of the heart and arthritic pains; that no attention should be paid this type of symptoms unless organic disease is present and lastly that this manifestation is no contraindication to operation. Babcock, of Chicago, years ago emphasized this point in the diagnosis of gall-bladder disease. Dr. Muller earnestly advocated the broader and more frequent use of laboratory functional tests and closing, mentioned the following 3 tests that were most useful as an aid in diagnosis: The Rosental, VanDenbergh and levulose tests. X-rays are of some help in finding the shadow of a stone; they are obviously invaluable, but the percentage of possible findings is questionable; in Crile's clinic, 70% demonstrated positive findings where stones were present, the radiographs being taken in series and in 5 different positions.

Graham's test, which is one of the newest, consists in injecting a certain sodium salt into the blood, which, eventually finding its way into the gall-bladder, enables the demonstrating of a shadow of the gall-bladder when normal. This test is in its infancy. Finally, in closing, Dr. Muller urged that the gall-bladder be kept in mind as a focal source of infection similar in its remote consequences to the tonsils and teeth.

Dr. Muller's paper was discussed by Drs. Davidson, Andrews and Senseman.

The latter half of the program was devoted to a splendid and comprehensive dissertation on "Brain Surgery" by Dr. William Sharpe, Professor of Neurosurgery at Bellevue. Dr. Sharpe prefaced his discussion with a brief statement in which he mentioned encouraging results of neurosurgery and attributed this to a better coöperation between neurologist and neurosurgeon and to improved technic.

Dr. Sharpe advocated constant use of the spinal mercuriomanometer and the ophthalmoscope. Among the discouraging types in conditions met with are brain tumors, true brain abscess and internal hydrocephalus with complete blocking of the ventricles, which type usually follows meningitis. Of the more encouraging conditions, he outlined the following: (1) Trifacial neuralgia, for which he advocated thorough medical treatment before operation is resorted to. (2) Spinal cord lesions; the diagnosis is made earlier than in brain lesions and the lesion maybe more accurately localized. Concerning trauma of the



spinal cord, he advised an exploratory laminectomy and not to wait unless one can demonstrate irreparable damage to the cord; however, not operating until the stage of acute shock is passed. (3) Peripheral nerve lesions in which nerves have been severed; performing an anastomosis of the two ends of the same nerve. In Erb's palsy, he advocated operation from 3 to 6 months after birth.

If one waits too long, formation of scar tissue in the nerve ends and within the sheaths will greatly complicate surgical procedure. In facial paralysis following an injury, such as fracture of the skull, or Bell's palsy, the direct operation on the nerve within the bony canal in the ear is the operation of choice. (4) External hydrocephalus; e.g. following meningitis or a supracortical hemorrhage, performing operation through subtemporal area. (5) Brain injuries. (a) Acute brain injury in adults. In a series of cases, 31% required operative treatment; approximately 66% made excellent recovery by palliative treatment, by means of repeated lumbar puncture or use of sodium chlorid or magnesium sulphate solutions. Contraindications to operation are mitral shock and the terminal period of medullary edema. One should not resort to procedures of any magnitude that would tend to add to the shock already present. (b) Chronic brain conditions in adults. In a series of cases studied, 69% were found to be suffering from effects of injury and at the time of operation "organization residue" was found at the site of the injury. (c) Chronic brain injury in children. Cerebral edema is more rare in children because they do not tend to develop high intracranial pressure caused by the hemorrhages. (d) Hemorrhage in the newborn. In a comprehensive survey completed in June, 1924, 8000 children were examined; 12% of these were found to have an increased intracranial pressure and presented the following birth history—81% were first children; 78% experienced difficult labor; 48% were instrumental deliveries; 69% were males; 85% did not nurse well, were drowsy and presented twitching of the extremities; 12% were apparently normal births and at one month of age showed no abnormal symptoms or signs; 8% of the mothers were given pituitrin. As symptoms of intracranial hemorrhage in the newborn, the following triad of symptoms were emphasized as indicative of hemorrhage; drowsiness, twitching and refusal to nurse. Lumbar puncture should always be resorted to and used for both diagnostic and therapeutic purposes.

In a series of lumbar punctures made at the Sloane Hospital upon the newborn, 24 to 48 hours after birth, 500 spinal fluids were analyzed as to blood findings. Results as follows: The first 100 showed 9% with bloody cerebrospinal fluid; second 100 showed 13; the third 100 gave 10; the fourth group 7; and in the fifth hundred 6 demonstrated blood.

Dr. Shape's paper was discussed by Drs. Muller, Allman, Taggart, Bew, Uzzell, Marcus, Held and Scanlan. A rising vote of thanks was tendered to both Dr. Sharpe and Dr. Muller for their excellent presentations, which were keenly appreciated by the members present.

#### Advance Notice of February Meeting.

A regular meeting of the Atlantic County Medical Society will be held at the Hotel Chal-

fonte, Friday, February 13, 1925, at 8:30 p. m. Phone 4444 Marine.

#### Program.

Dr. Robert H. Ivy, of Philadelphia, "Acute Swellings in the Submaxillary Region".

Dr. Louis C. Schroeder, of New York City, "Certain Aspects of Infant Feeding".

Physicians, Dentists and Students of Medicine are invited.

Edward F. Uzzell, Secretary.

D. Ward Scanlan, President.

#### Report of Atlantic City Hospital Staff.

D. W. Scanlan, M.D., Reporter.

The stated monthly meeting of the Atlantic City Hospital was held on the evening of December 19, 1924, the meeting being called to order by Dr. Otis Stickney, President.

Dr. Clyde M. Fish, of Pleasantville, New Jersey, was proposed for staff appointment as "Consultant in Tuberculosis", and his appointment was recommended to the Board of Governors for final action. Dr. Fish has for many years acted as head of the Pine Rest Sanatorium for Tuberculosis and is extremely well qualified for this position on the staff.

The Scientific Program of the evening was devoted to reports by Doctors Clarence Andrews, Edgar Darnall and David Allman. Due to the illness of Dr. E. C. Chew, the report of the medical service was read by Dr. Andrews, his associate. This medical service included a resumé for August, September, and October, 1924. The service included a report of 100 ward cases. Dr. Andrews gave a brief but concise summary of the fatal cases with a splendid report of the pathologic findings at necropsy.

Dr. Edgar Darnall reported his surgical service, consisting of 78 operations, with a resultant mortality of 3.8%. Of particular interest was the following case report: Women, middle aged, presenting a very large tumor in the abdomen. On admission she was apparently moribund, and therefore was allowed to rest for a few days. Upon operation a huge unilocular cyst was found containing 54 pints of fluid, of the type with thick walls and so adherent that it was impossible of removal. The redundant tissue was trimmed and the remnants were painted with phenol and iodine. Patient recovered. The kidney function was 30%.

Dr. Allman reported in brief, a similar operation for a cyst that was attached to the liver and which was treated in a similar manner, with a complete recovery.

A third item of the Scientific Program consisted of a resumé of surgical service today and of 10 years ago, by Dr. David Allman. He entertained interesting and conclusive views relative to the rapid and constant growth of the Atlantic City Hospital. He detailed a comparative study between August, September and October, 1914, and the identical months in 1924, and his observations were the more pointed because of the fact that he was resident physician on the same surgical service of which he is now chief. The growth of the institution has been accompanied by a similar growth in attendants connected with the daily administration of hospital duties; 10 years ago the hospital boasted of 1 resident physician, 18 pupil nurses and 10 other nurses and

supervisors. At present there are on duty 6 resident physicians, 44 pupil nurses, 15 general duty nurses, 5 attendants, 4 ward maids, 2 helpers, 6 supervisors or staff nurses, 2 anesthetists, 2 duggists, 5 laboratory workers and 9 on the office staff.

Comparative admissions were as follows:

	1914	1924
August.....	229.....	481
September.....	172.....	397
October.....	143.....	354

Ten years ago, during these 3 months there were 24 free operations. For the same 3 months in 1924, there were 128 free operations; an increase of over 400%.

Dr. Allman voiced the sentiments of the staff in further stating that the attitude of mind of the layman has been clarified to a very great extent, in entertaining a more receptive attitude toward the hospital and all that it embodies, and although Atlantic City has made an extremely rapid growth in population, the hospital has outdistanced this ratio to a marked extent within the past 10 years. Pertaining to Case 2865, Dr. Marvel, Jr., mentioned a report that embodied 60 cases of diabetes requiring operation. It was the custom as a routine procedure to bring the blood as near to normal as possible, to 125 or 130 milligrams. It was mentioned that the heart may be unable to stand the heavy dose of insulin and so by consuming the glycogenic reserve of the heart muscle, may cause death.

Dr. Richard Bew stipulated that the intravenous administration of glucose for heart failure had for its basic principle the glycogenic theory. He further maintained that if one is confronted with a case of diabetic coma, with diacetic acid and acetone in the urine, it is justifiable to urge the rapid admission of insulin and that the physician has no right to indulge in a theoretic discussion in such critical circumstances. Caffein-sodium-benzoate was recommended by Joslin as a respiratory and cardiac stimulant. Both Joslin and Allan bar the usage of alkalies, but Dr. Bew justified the procedure of injecting salt solution subcutaneously because it has a tendency to increase excretion.

Dr. Allman closed the discussion, and moved that the annual meeting be held on the evening of the usual date for the January meeting. This motion was adopted.

#### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Bergen County Medical Society was held at the Hackensack Hospital, Tuesday, Jan. 13, at 8:30 p. m., the president, Dr. Trossbach in the chair.

Dr. Christopher C. Beling, of Newark, read the paper of the evening, entitled, "The Dangerous Lunatic". Dr. Beling started his subject by explaining the difference between the medical and legal conceptions of insanity and quoted the legal definition of a lunatic as "one of unsound mind, dangerous to himself and others". Any type of insanity, according to Dr. Beling, may be dangerous,—the feeble minded, those suffering from manic-depressive psychoses, early paretics, especially epi-

leptics in the stage of transitory mania, and paranoiacs who are the most homicidal because of their delusions of persecution. This last type, he said, is apt to be shrewd and able to hide the delusions; they are the patients who when confined secure a writ of habeas corpus and convince a jury of their sanity. In handling these cases for commitment the Doctor must confine his statements to facts that can be proved; opinions and hearsay are worthless in court. The physician must act in good faith and with reasonable care. He can best safeguard himself by making commitments under the provisions of Case A, which provides for a court hearing.

In order to emphasize the attitude of the courts toward commitment of the insane, Dr. Being quoted the following legal rulings:

#### Boech v. Kick.

(Supreme Court of New Jersey, April 4, 1922.)  
(Syllabus by the Court.)

1. False imprisonment—7(3)—Arrest of mentally deranged person justified by showing insanity and necessity of restraint.

When one has restrained a member of society of his liberty, who may be deranged in his mind, he must show, in order to justify such conduct, when charged therewith as a wrongful act, not only that the person was insane at the time, but also, that to permit him to go at large imperiled his own safety or the safety of the public. The defendant assumes the burden of showing that fact and the imminent necessity of the restraint. He must show that the danger from the plaintiff's being at large was not merely possible, but probable.

#### The Theory of the Law.

1. The Supreme Court of Iowa has recently examined this subject, and in a careful opinion said in the case of Maxwell v. Maxwell, 189 Iowa, 7, 177 N. W. 541, 10 A. L. R. 482, the right of the one to arrest and restrain another of his liberty on the ground of insanity is dependant upon the existence of the fact upon which the right is predicated. A citizen has not the right to arrest any member of society, who may be deranged in his mind, and therefore, in order to justify his act, when charged with wrongful arrest, he must show, not only that the defendant was insane at the time, but also that to permit him to go at large imperiled his own safety or the safety of the public. It is not sufficient to show that he was lacking in mental capacity, or had hallucinations, but it must go further and show that to permit him to go unrestrained imperiled his own safety or the safety of the public. It is not sufficient in cases of this kind that he had probable grounds for suspecting he was insane or probable reason for believing that his being at large would imperil the safety of the public. He must justify it by proving the fact upon which his right to restrain rested. He assumes the burden of showing that fact and the imminent necessity of the restraint. The principle there stated, in that case, is rested on a well-considered case by the Supreme Court of Michigan (Van Deusen v. Newcome, 40 Mich. 90)—so, the subject is considered in the case of Colby v. Jackson, 12 N. H. 526.

The defendant must show that danger from the plaintiff's being at large was not merely possible, but probable. Nowhere in the evi-



dence can we find any legal justification for the defendant's active participation in this affair; he says "he had to do with it simply as a friend of his"; i.e., Boesch. Nowhere in the record is it denied that he did not participate in and was not an active factor in placing Mrs. Boesch in the Essex County Hospital for the Insane.

By deception and trickery he brought about the plaintiff's examination by the physicians, by the same methods he got her to go with him in an automobile to the Overbrook Asylum. It is always risky business to intermeddle in the affairs of husband and wife; one does so always at his peril. This case is a conspicuous illustration of that fact.

**Abstracted from Cooley's Constitutional Limitations, 1883. Fifth Edition. Chap. X. No. 339, page 413.—The Writ of Habeas Corpus.** "Sir William Blackstone says, personal liberty consists in the power of locomotion, of changing situation, or moving one's person to whatsoever place one's own inclination may direct, without imprisonment or restraint, unless by due course of law."

"In examining the qualifications and restrictions which the law imposes on personal liberty, we shall find them classed, according to their purpose, as first, those of a public, and second, those of a private nature."

In the first class, anent to our subject are "those which may become important to protect the community against the acts of those, who by reason of mental infirmity, are incapable of self-control."

**Abstr.—The American & Eng. Ency. of Law**—Compiled by John Hanston Merrill. Pub. Edw. Thompson Co., Northport, L. I., N. Y., 1890. Vol. XI., page 112.

(2.) **Confinement of Persons Alleged to be Insane.** Where a person is insane to such a degree that it would be dangerous both to himself and others to permit him to remain at liberty, he may be confined by any one, but only so long as it may be necessary to institute proper proceedings to determine his insanity. Where, however, neither the welfare of the insane person, nor the safety of others requires that he shall be confined, the person who arrests and detains him becomes liable to damages to the person arrested."

In the discussion of Dr. Beling's paper, Dr. Armstrong said that there is but one thing for the medical profession to do and that is to ask that the law be changed for it is an outrage as it stands today; the patient must commit a crime before he can be recognized by law as being insane.

Dr. Bell spoke of the impossibility of the physician possessing both expert medical and legal knowledge and of the injustice of such an expectation on the part of the courts.

Dr. Beling replied that it is true we are always in danger when making these commitments. You have all heard that "ignorance of the law is no excuse". To mitigate this difficulty, we can: First, induce many patients to go voluntarily to an institution; secondly, secure a law enabling a judge, on the opinion of a doctor, to commit a patient to a psychopathic hospital for a short period of observation; thirdly, commit only those patients who are frankly insane and those whose entire family favor the commitment.

Dr. Freeland said that in his case the decision of a New Jersey court had been cited

to the effect that responsibility for commitment lies with the relative applying for the commitment and with the judge signing it, not with the examining physician. Although the woman in this case was proved insane, by the judgment of medical experts, the judge instructed the jury that if they considered her sane they could find charges against the examining physician; which the jury did.

Dr. Beling said that in that instance there was apparently a miscarriage of justice and that we should see if we cannot bring about some method of practice by which commitments may be made more definite and by which the doctors can be protected.

Dr. Essertier asked whether our medical insurance covers these cases.

Dr. Beling replied that he thinks the policy does cover this practice and that it is a good thing for every member of the profession to take out such insurance.

### Bergen County Hospitals.

The Associated Physicians of the Hackensack Hospital recently held their regular monthly meeting in Bergen Pines.

The officers of the Association presided over the meeting in disposing of the ordinary routine of business, after which Superintendent Morrow presented a scientific program consisting of 8 reels on "The Diagnosis of Tuberculosis", prepared by the U. S. Army and loaned by the Army Medical Museum, Washington, D. C.

Dr. B. S. Pollak, Superintendent of Hudson County Tuberculosis Sanatorium, gave a brilliant address on tuberculosis and punctuated the exhibition of films with proper interpretations.

Dr. Gordon K. Dickinson, President of the Board of Managers of the Hudson County Tuberculosis Sanatorium, also addressed the meeting with some very interesting remarks.

Dr. Hallett and Dr. McFadden, of the Hackensack Hospital, discussed the papers and commented on the communicable disease hospitals' activity.

Dr. Payne, a member of the Board of Managers of Bergen Pines, assured the visiting physicians of the Hackensack Hospital of the desire, on the part of all in the County Institution, to coöperate with the Hackensack Hospital and other hospitals of the county, and with the medical profession, in stamping out communicable diseases.

A number of nurses and employees who had volunteered for the Dick Test were presented in connection with the work on scarlet fever and diphtheria. The meeting was evidence of the interest of all physicians in the close coördination of all activities relating to disease prevention.

There was an enjoyable social session before adjournment and refreshments were served.

### BURLINGTON COUNTY.

R. I. Downes, M.D., Reporter.

The regular meeting of the Burlington County Medical Society was held in St. Andrew's Parish house, Mt. Holly, N. J., Wednesday, Jan. 14, 1925, at 1:30 p. m. There were 18 members present and Dr. H. E. Longsdorf presided.



Four applications for membership were received.

No action was taken on the recommendation of the Welfare Committee with respect to the old legislative bill No. 159, but a committee of 3 was appointed to consider the substance of that bill and to report to Dr. Andrew F. McBride.

Dr. Daniel F. Remer, chairman of the section on surgery, introduced Dr. J. B. Carnett, of Philadelphia, who gave a very interesting and instructive talk on "The Early Diagnosis of Carcinoma".

### CAMDEN COUNTY.

Henry B. Decker, M.D., Secretary.

The annual meeting of the Camden City Medical Society was held January 6, 1925, Dr. F. W. Shafer presiding.

After the reading of the minutes of the December meeting Drs. Helen Schrack and Max Ruttenberg were introduced as new members. Dr. Henry O. Reik, Editor of the State Journal, was present and told the plans of the Journal for the coming year.

Dr. W. J. Barrett read the history for 1924. It was in his best style, which is a cross between that of Al. Jolson and a camp-meeting. The President had to declare a recess so that the members could recover from the effects of the laughter that the paper produced. Dr. Pratt, our venerable treasurer, reported that the treasury still has some money but that some of the members had forgotten to pay their dues.

Dr. Daniel Strock read a brief history of the beginning and early days of the society. He told of the continual struggle, since the organization in 1853, of this society to promote health in the city. The history of the society covers a period of years in which some of the most important medical discoveries have been made. At the first meeting, the essayist noted that in the southern section of Camden malaria was prevalent and in the northern section typhoid fever. This was supposed, in the case of malaria, to be due to certain prevailing winds. Now we can see that these winds probably carried the infected mosquitoes. The gentlemen who practiced medicine 70 years ago were very keen observers.

Dr. Thomas B. Lee presented a portrait of the late Dr. Paul Hamilton Markley, one of the leading physicians of Camden. The portrait was accepted by Dr. Strock for the society.

Dr. E. W. Shope was elected to membership.

Dr. F. W. Shafer, retiring president, read an essay on fractures of the wrist.

The following officers were elected for 1925: President: Thomas K. Lewis. Vice-President: Beulah Hollinshead. Treasurer: William H. Pratt. Historian: Wesley J. Barrett. Secretary: Henry B. Decker. Standing Committee: Drs. MacAllister, Leavitt, and Rogers. Legislative Committee: Drs. Pechin, Rose, and Saunders.

Board of Managers, Camden City Dispensary: Drs. Daniel Strock, P. M. Mecray, T. B. Lee, H. H. Davis, J. L. Mahaffey, J. L. Nicholson, W. W. Kain, and A. H. Lippincott.

The president-elect was inducted into office and the meeting adjourned.

### CUMBERLAND COUNTY.

Elton S. Corson, M. D., Reporter.

The stated quarterly meeting of the Cumberland County Medical Society was held at the Newcomb Memorial Hospital, Vineland, on the invitation of the trustees of that institution, Tuesday afternoon, January 6, 1925. Dr. E. C. Lyon presided. Drs. J. F. Reeves, of Bridgeton, and Mary E. Slattery, of the New Jersey State Home for Feeble-Minded Women, were duly elected to membership.

In response to a request from the Atlantic County Medical Society, reciprocity was established by the appointment of delegates to that Society.

Dr. Henry O. Reik, Editor of the Journal of the State Medical Society, was present and spoke of the duties pertaining to that office, requesting that full reports of the county society meetings be submitted, promptly for publication, as one means for maintaining the interest of members in organization work.

Dr. Frank C. Hammond, Dean of the Medical Department of Temple University, spoke on the "Use of Radium in the Treatment of Diseases of Women". He demonstrated the technic in the application of radium and explained its beneficial results in arresting hemorrhage from tumors and nonmalignant conditions, in some cases curing and in others arresting the growth and in the relief of pain and discharge from cancer. Dr. Hammond explained that a group of physicians in Philadelphia had organized a company whose object is to enable practicing physicians anywhere near Philadelphia to obtain the use of radium by its rental from the company; this making it possible for any physician to secure radium for use in his office or in the homes of his patients.

A sumptuous dinner was served in the nurses' dining room and afterward a tour of inspection was made through the hospital.

### ESSEX COUNTY.

Alfred Stahl, M.D., F.A.C.S., Reporter.

The regular meeting of the Essex County Medical Society was held Jan. 8, 1925, at The Academy of Medicine of Northern New Jersey at Newark. A report from the Council was received recommending to the Society the adoption of the following resolution: "That the Welfare Committee of the State Society is hereby respectfully requested to reconsider its reported conclusion not to introduce any legislation this year; and, further, that the Welfare Committee is urged to reintroduce, this year, legislation to protect the title of Doctor." This Resolution was adopted without a dissenting vote, and in the discussion only one member spoke against its adoption.

Dr. Bertram L. Byrant, secretary of the Medical Society of The State of Maine, read a very comprehensive paper on "Periodic Health Examination" (Dr. Bryant's paper is published in full in this issue of the Journal.) Dr. A. F. Thomson, secretary of Kings County (N.Y.) Medical Society, told about the workings of the periodic health examinations in his County.

A meeting of the New Jersey State Pediatric Society was held at the Newark Athletic Club, Jan. 19, 1925. After an informal dinner, a very

interesting program was enjoyed by those present. This included papers and discussions on Infant Feeding, Pathology and the Thymus Gland, Epidemic Cerebrospinal Fever and Celliac Disease.

#### GLOUCESTER COUNTY.

The meeting of the Gloucester County Medical Society at Hotel Paul on Thursday, January 15, was one of the most instructive and interesting ever held. The following members were present: Drs. Wood and Sinexon, of Paulsboro; Knight, Philips, Burkett and Lummis, of Pitman; Hollinshed and Hunter, of Westville; Campbell, Underwood, Wm. Brewer, A. Roy Carpenter, Davenport, Diverty, of Woodbury; Ruth Clement, of National Park; Dr. Downs of Swedesboro, and Ashcraft, of Mullica Hill. Drs. Clement, Pechin and Saunders, of Camden County, were guests.

Interesting cases were reported by Drs. Campbell, Burkett, Wood, Hollinshed, Hunter, Knight, Lummis and Underwood.

The Society decided to have 8 literary meetings a year instead of 4 as in the past.

Six reels of moving pictures on "Tuberculosis" were given by Dr. Pollak of Newark, who gave an excellent talk on same.

The usual dinner followed the meeting.

#### HUDSON COUNTY.

Wm. Freille, M.D., F.A.C.S., Reporter.

The stated meeting of the Hudson County Medical Society was held Tuesday evening, January 6, 1925, at the Jersey City Hospital. The President, E. J. Luippold, called the meeting to order at 8:30 p. m. Routine business was transacted, and the applicants proposed at the previous meeting were elected to membership.

Dr. Yeaton, for the Committee on Revision of Constitution and By-Laws, stated that Dr. Haskings had been doing most of the work on this committee. An old copy of the By-Laws had been resurrected and Dr. Haskings expects to put the revision in shape to report at the March meeting.

Dr. Jos. F. Londrigan, chairman of the dinner committee, reported that the annual banquet would be staged on February 7, 1925, at Braunstein's, Union City; that the committee had tried to emulate the conditions of last year; assembly at 8:30 p. m.

Resolutions by Dr. Lucius F. Donohoe, that the Society go on record as endorsing the proposed bridge over the Kill von Kull, between Bergen Point and Port Richmond, was adopted.

Dr. Joseph Franklin Montague, Professor of Surgery, Department of Colo-Proctology, New York University and Bellevue Hospital Medical College, took for his subject "Pruritus of the Perineum" (Pruritus Ani, Vulvae and Scroti), and illustrated his talk by motion pictures. (This paper will be published in the next issue of the Journal).

Dr. G. K. Dickinson, called upon to open the discussion, said he was not competent to talk on this topic, but he did not remember ever having heard a lecture on such a topic which had been so interesting and instructive.

Dr. Chas. B. Kelley said that he had enjoyed the presentation, because of the subject in which he was interested, and on account of the entertaining way in which it had

been presented. He referred to the close association between gynecologic and rectal diseases and the necessity for a knowledge of both; that the first essential was to find the etiologic factors, before treatment could be of avail. Having had cryptitis, he spoke at some length on this condition as causing pruritis. He mentioned 4 cases recently referred to him, where all sorts of local applications had been resorted to, and all showed sugar in the urine. He said that in some cases persons susceptible to shell fish, strawberries, etc., would have an itch in the perineum even if not in other parts of the body. Dr. Kelley stated that the treatment of pruritis of the perineum, did not always mean surgery of the perineum itself, as evidenced by the fact that a persistent case had yielded on removal of an infected cervix and pus tubes.

Dr. Jaffin cited a case of pruritis which got well after domestic difficulties were smoothed out. He commended the lecturer's method of presentation and thought if it were applied to other less homely things than pruritis, it would be a great help to the study of medicine. Dr. Montague, in closing, said that he had been able to present in the limited time at command only part of the topic; that cryptitis and other phases were covered in his publication. He demanded a complete physical examination in every case of pruritis.

He did not recommend operation in every case; that the surgical procedure could not be regarded as a distinctly curative measure, but as a stop, giving at least marked relief. He advocated the use of vaccines.

#### MERCER COUNTY.

A Dunbar Hutchinson, M.D., Reporter.

The Mercer County Society met in Hillwood Inn, in regular session, as the guest of "The Castanea Dairy Co." on the evening of Jan. 14, 1925.

Following a very delightful dinner, to which about 60 of our members sat down, the Society was entertained by an extremely interesting discourse on the subject of "Milk Production and Distribution" by Dr. Charles E. North, a laboratory expert and a man with wide experience in the organization of clean milk producing stations.

Discussion following the address was entered into by Health Officer Fell, who dwelt upon the necessity of legislation, for which he has been working, in the regulation of producing clean milk.

Dr. David F. Weeks, of Skillman, added interest to the discussion, by his timely suggestions with reference to the placing of more emphasis upon the health side, than upon the bonus paid for the production of milk containing a minimum bacterial count.

Drs. Costill, Adams and Yaxujian spoke upon the subject of support of the municipal authorities in their efforts to obtain satisfactory laws governing the whole problem of clean milk.

Dr. Haggerty, President of the Mercer County Society, appointed a committee to draft suitable resolutions upon the death of Dr. George H. Franklin of Hightstown, consisting of Drs. Wm. L. Wilbur, of Hightstown; E. S. Hawkes and M. W. Reddan of Trenton.

Several applications were referred to the Membership Committee.



**MONMOUTH COUNTY.**

S. H. Nichols, M.D., Reporter.

The annual meeting of the Monmouth County Medical Society was held at the American House, Freehold, on Tuesday, December 9, 1924. Clinical cases of interest were reported by Drs. Slocum, Wilson and Nichols of the Memorial Hospital Staff. The Society had the pleasure of hearing one of the recently elected Assemblymen speak on proposed legislative matters and Dr. Henry O. Reik, Editor of the State Journal, discuss the activities and policies of the State Medical Societies. Dr. Warner spoke for the Welfare Committee of the County Society, and the Society as an organization promised coöperation in the work of the State Welfare Committee and of the Journal.

The following officers were elected for the new year. President: W. G. Herrman, Asbury Park. Vice-President: H. S. Brown, Freehold. Secretary: J. C. Clayton, Freehold. Treasurer: O. R. Holters, Asbury Park. Reporter: S. H. Nichols, Long Branch. Censor: R. B. Wilson, Red Bank. County Delegates to State Society: L. J. Altschul, Long Branch; H. S. Brown, Freehold. New members elected: Frank J. Goff, Red Bank; and, John B. Meekin, Asbury Park.

**PASSAIC COUNTY.**

Louis G. Shapiro, M.D., Reporter.

The January meeting of the Passaic County Medical Society was held in the Chamber of Commerce rooms on Thursday evening, January 8. Dr. Thomas Dingman, who succeeded Dr. Ryan as president, officiated. The meeting was called to order at 9:10 p. m.; 41 members were present.

The speaker of the evening was Dr. Dana W. Atchley, of Columbia University, N. Y., who addressed the society on "The Physiologic Approach to the Treatment of Chronic Nephritis". Dr. Atchley introduced his subject by emphasizing the fact that as a disease is understood, so is it accurately treated. He named diphtheria as a most accurately treated disease for this reason. He pointed out, however, that there is no known cause of chronic nephritis, and we are compelled to treat the individual nephritic, in whom some agent has caused a change in physiology, and the organism must be readjusted to meet its new needs. To be able to successfully treat chronic nephritis, we must, therefore, have (1) an understanding of renal physiology and its disturbance, and (2) an understanding of the clinical course of the disease.

Dr. Atchley spoke of the various physiologic functions of the kidney: its ability to eliminate water; its power to preserve normal alkalinity in the body, by combining urea and an acid through the property of hydrogen-ion; its function of concentrating solids; and, of eliminating albuminous and other foreign substances such as phenolphthalein. Edema is produced in chronic nephritis by the inability of the kidney to eliminate water and we combat this by curtailing water and salt intake. Sodium salts increase edema. Calcium salts, the chloride and lactate, reduce it. The inability of the kidney in chronic nephritis to eliminate albuminous substances results in urea retention in the blood and high blood-nitrogen. This must be combatted

by restricting the protein intake.

Dr. Atchley reviewed the various classifications of chronic nephritis in the past, which have been very confusing. He said that today the chronic nephritics are classed into (1) simple edematous cases; (2) simple nitrogen retention cases. In the former there is salt and water retention, chronic edema, albumin and casts, and languor and tiredness.

This may later develop into the second type (nitrogen retention case) the typical picture of which is a man 40 years old with morning headache, dizziness, dimness of vision, loss of weight, thickening of arteries, choked disk, hypertension, a urine specific gravity of 1010-1012 with a faint trace of albumin and 10% phenolphthalein excretion.

A constitutional toxic process is responsible for chronic nephritis. We must first eliminate all local foci of infection in the body, wherever they may be found. Restriction of water, meat, cheese, eggs and salt, as the particular case requires, is exceedingly important. Diuretics like theobromin and theophyllin stimulate kidney function, but may do more harm than good. Phlebotomy is a great aid in acute nephritis, but little good in chronic nephritis. Sweating is neither rational nor effective. It weakens the patient and he may catch cold. The rational way of treating chronic nephritis is by the study of cause and effect. In many cases a physician must admit his helplessness but future progress depends upon finding the cause. Dr. Dingman complimented Dr. Atchley for his clear presentation of the subject and expressed the thanks of the society.

Dr. Saul W. Chester was unanimously elected to membership.

**UNION COUNTY.**

Russell A. Shirrefs, M.D., Reporter.

A meeting of the Union County Medical Society was held at the Elizabeth General Hospital on the evening of January 14, about 50 members being present. In addition to the routine business, there were 5 proposals for membership which were referred to the proper committee for consideration. A hearing was given Dr. I. A. Lawrence, whose license to practice medicine was revoked several years ago for illegal practices. He appealed to this Society to endorse his efforts for reinstatement. A vote being taken, his appeal was denied and endorsement refused.

Dr. Arthur Casilli, city pathologist, was the essayist of the evening and spoke on "The Pathology of Acute and Chronic Infections". He emphasized the importance of making the laboratory an assistant to the physician, to supplement his clinical findings. His address revealed an originality of thought and an ability of expression which evoked favorable comment,—and a vote of thanks.

It was a pleasure to have among our guests Dr. L. F. Donohoe, President of the State Society; its Secretary, Dr. J. B. Morrison; and the Editor of the State Journal, Dr. Henry O. Reik. Dr. Donohoe gave in brief a summary of what the State Society was trying to accomplish, and urged upon us the need of interest and coöperation on the part of individual members in the activities of the State body. Dr. Morrison spoke to similar effect, and told of the need for legislation to curb the operations of the various cults and irregulars.



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## CRANKING OR CHAUFFEUR'S FRACTURES.

E. L. ELIASON, A.B., M.D., Sc.D., F.A.C.S.

(Read before the Cumberland County Medical Society, Bridgeton, N. J.,  
October 7, 1924.)

Backfire, cranking or chauffeur's fractures are all caused by a gas-engine, crank or fly-wheel reversing its direction. According to Burnham, the earliest reference in the literature is found in the year 1899-1900. In 1904, both Champonnière and Madelung described the chauffeur's fracture in detail as being a fracture of the lower extremity of the radius, stating that it was caused in either of two ways, i. e., by impact upon or compression through the palm, or by hyperextension of the wrist. Bizarro analyzed 105 forearm fractures, of which 37 were chauffeur fractures; 36% of his series. Very few of his cases showed a typical "compression" or "Colles'" fracture of the radius. The line of fracture usually involves the carpal articulation. Epiphyseal separation has been caused by backfire, 4 cases being reported by Bizarro, who also mentioned 4 cases of "reversed Colles", 2 of which were due to backfire.

When the backfire causes hyperextension, the fracture line corresponds almost exactly to that of hyperextension fractures produced experimentally (Burnham), as well as to those due to a fall on the hand thrown out behind a person to break a backward fall.

Chauffeur's fracture due to the backfiring of a Ford or a motor-boat motor is usually a fracture of the base of the styloid process of the radius, whereas that due to the backfiring of the motors of larger trucks is likely to be of the Colles' type. The difference is probably attributable to the position taken by the driver; in the first class, he usually stands to the side and at a little distance from his crank, while in the second, because of the close bumper, he must stand directly in front of and close to it. The former thus produces

its effect by torsion, while the latter acts by "arrachement" or compression, depending upon whether the crank strikes directly against the heel of the hand or against the metacarpals, hyperextending the entire hand.

Chauffeur's fracture is extremely uncommon in the left radius. The surgeon of a very large automobile plant, in which handcranking of motors is still extensively practiced states, in a personal communication, that his experience yields no case of left sided chauffeur's fracture. This fact is no doubt due to the facts, first, that most left handed persons crank with the right hand, and second, that a backfiring crank is pulled out of the left hand without twisting the wrist or jamming the hand backward upon the forearm. If the hand holds to the crank handle, when the backfiring occurs on the uplift, the "arrachement" fracture will probably be in the anterior lip of the lower radial articulation (Barton's fracture) with relatively slight displacement, a condition common to most fractures here because of the ligamentous tug. All fractures at the lower end of the radius are more common in adults, especially those in the "third bone age" of Baetjer, namely 40 to 60 years of age. In children, the commonest injury in this region is fracture of both bones above the suprastyloid level, either green-stick or complete; while in adolescence, fracture of the radius alone,  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches above the joint, is the usual type. These same facts hold true in backfire fractures.

At the present time, the term "Chauffeur's fracture" is meant to apply to fracture through the base of the radial styloid, but in view of the fact that the subjoined statistics indicate that fracture resulting from the backfire of the crank of a gasoline engine may be sustained at 15 different situations in the bones of the carpus and forearm, this is too narrow an application of the term. The following table and figures has been compiled from a series of 3785 forearm fractures that have been roentgenographed in the University of Pennsylvania and Howard Hospitals, of Philadelphia, and it should be stated that the term Colles' fracture is used in the present day interpretation, i. e., a fracture of the radius in the lower  $\frac{3}{4}$  in. of the bone, and not as Colles' originally described it, which was really as a fracture of the lower end of the radial shaft.

#### Fractures Due to Backfire.

##### Radius:

Head of Radius	2
Upper-third	1
Middle-third of shaft	2
Lower-third of shaft	18 (largest single cause at this level).
Shaft above Colles' level (adolescent level)	29
Shaft above Colles' level plus styloid of ulna	8
Colles' fracture	78
Colles' fracture plus styloid of ulna	27
Barton's fracture	2

Styloid of the radius (Chauffeur's)	71 (largest single cause at this level).
Epiphyseal separation of radius	29
Radius and ulna:	
Lower-third of shaft	5
Above Colles' level	1
Ulna:	
Upper-third of shaft	1
Upper-third of ulna	1
Styloid of ulna	7
	<hr/> 282

It is seen from the above that about 7.4% of the fractures of the radius and ulna, in a series of 3785, were due to backfire. Of these, the so-called Colles' headed the list, constituting 27.6% of the total number of 282, while the so-called chauffeur's fracture (styloid of radius) amounted to 25.2% of the total number. It would seem best, therefore, from the point of etiology not to apply the term Chauffeur's fracture to fracture of the styloid of the radius exclusively, but to all fractures resulting from backfire.

*Diagnosis*—(Colles' Fracture): When a case is seen immediately before swelling obscures the landmarks, diagnosis is relatively easy. Due consideration should be given to the anatomic points as compared with the uninjured forearm. In the transverse fractures of the Colles' type there are the usual symptoms of pain, tenderness, swelling, disability, crepitus and deformity. The pain is usually rather severe and of a throbbing, aching type. It is not of the stabbing character experienced when muscles are injured by sharp fragments of bone. In examining these cases, a general anesthetic should be used if reduction is to be done. Without an anesthetic, it is cruel to try to demonstrate crepitus and abnormal mobility or to break up an impaction. The type and position of tenderness is a valuable diagnostic aid because, by its proper localization, much information can be gained. Bearing in mind that the joint-line extends in a crescent about  $\frac{1}{2}$  inch above the styloid, "point pressure" is made with the rubber end of a pencil, a penholder or similar object, on the back of the radius, starting above the painful area and gradually passing down toward the wrist. "Point pressure pain" elicited over the radius above the wrist-joint, in the absence of direct trauma, strongly indicates a fracture. Should the point pressure develop pain and tenderness over the joint-line only, there is probably no fracture above, and the diagnosis of sprain or synovitis of the wrist should then be made. Swelling occurs rapidly and soon extends down over the wrist to the back of the hand. It is frequently very pronounced along the tensor tendons of the thumb and fingers, due to tendon sheath injury with effusion. Disability may or may not be marked. In many instances, the patient has not suspected the existence of a bone injury for some hours. In other cases, the loss of function is very pronounced, the patient not being



able fully to flex or extend the fingers without great pain. The thumb extensors suffer especially. Crepitus is not always present. In fissured, longitudinal and impacted fractures it is absent until, in the latter condition, the impaction is broken up. In the absence of impaction, in a Colles' fracture, crepitus is very evident, but one must not mistake the soft crepitation of an acute tenosynovitis for the crepitus of fracture; the former condition is usually the result of a direct blow or of unaccustomed exercise. Shoveling the walks after the first winters show, using tennis rackets for the first time of the season, usually brings a crop of these tenosynovitis cases. In these, however, finger motion produces the soft crepitation and repeated motion frequently causes its temporary disappearance.

Deformity is usually marked. The radial styloid is driven up the forearm, making the interstyloid line transverse, or, in extreme cases, oblique in the reverse direction. There is usually radial deviation of the hand and the thenar eminence is on a level with or above the hypothenar eminence. The anterior skin lines are inclined upward on the radial side, whereas normally they incline slightly downward. The wrist is held in slight flexion. There is usually the "silver fork" deformity due to displacement of the lower fragment upward, backward and to the radial side, causing a decided hump above the wrist. This deformity may be anterior in the reversed (Smith) or "garden spade" type. The wrist is widened because of stretching or tearing of the radio-ulnar ligament. The ulnar head becomes less prominent posteriorly but more so anteriorly. The lower radial arch is lost and often, in its place, the lower edge of the upper fragment can be felt. The lower fragment is rotated posteriorly so that the plane of articular surface is reversed, being  $10^{\circ}$  to  $20^{\circ}$  posterior to the perpendicular. If the ulnar styloid is broken, the fracture may be demonstrated by its mobility. The fracture, however, is not usually recognized. There may be no deformity, no demonstrable displacement, and merely point pressure pain. Or, again, there may be abduction of the hand but no forearm deformity of the "silver fork" type.

*Differential Diagnosis:* Probably more than anywhere else in the forearm, it is important to recognize what possible injuries may be present when the trauma is at or just above the wrist. Given a young patient, with the history of a backfire injury, one looks for an epiphyseal separation of the lower radial extremity; if under 17 years of age, an incomplete fracture,  $1\frac{1}{2}$  to 2 inches above the styloid. Sprain and dislocation are extremely rare in adolescence. In young adults, with a history of compression or hyperextension, the injury is probably a Colles' fracture. Styloid fracture of the radius should be suspected. Scaphoid fractures which have no deformity, show painful wrist motion, limited adduction, tenderness in the "snuff box" and point pressure tenderness or pain over the

scaphoid, associated with joint swelling on the radial side. The rare posterior dislocation shows no change in the obliquity of the interstyloid line but does produce a shortening of the distance between the styloids and the finger tips; the wrist is rigid, in semi-flexion—more so than in a fracture; the prominence on the dorsum of the forearm is lower down toward the hand, and is smooth; the examining fingers are able to palpate the prominent anterior edge of the lower radial articular surface. There is no crepitus.

Sprain of the wrist, also a rare condition, results in no bony deformity, crepitus, nor abnormal mobility but does give joint swelling and limitation of motion. Point pressure pain is over the joint-line.

When dislocation of the semilunar bone occurs, there is painful and limited flexor tendon motion, limitation of wrist, and the x-rays will determine the condition positively, especially if a lateral view be taken. Tenosynovitis of the extensor tendons passing over the posterior aspect of the joint gives a soft, moist crepitation upon moving the fingers and there is also swelling and tenderness extending well up the forearm. Recognizing the difficulty of diagnosis in injuries about the wrist, it is well to resort to the roentgenogram in all cases that are in the least suspicious or with other than transitory symptoms.

As fractures of the styloid of the radius and the Colles' type, with and without ulnar styloid, constituted over 50% of backfire fractures, the treatment of these conditions only will be discussed, the more unusual shaft fractures not being considered for want of time.

*Treatment of Backfire Fractures of Lower Extremity of the Radius:*

The nature of the treatment accorded fractures at the lower extremity of the radius must necessarily be influenced by the age of the patient, together with the nature of the deformity, the character of the fracture and the difficulty of maintaining a satisfactory reduction. For the suprazyloid fracture or epiphyseal separation, the following treatment is applicable:

*Reduction:* The patient should have a general anesthetic and the fluoroscope should be available. Impacted fractures in good position should not be disturbed. Impacted fractures in only fair position, if comminuted, in the aged, should not be disturbed. Most frequently the fracture can be reduced simply by forcibly flexing and at the same time carrying the hand to the ulnar side, using the ulna as a pivot fulcrum. A block of wood, as a fulcrum over which to bend the fracture, is useful. Forcible traction in the line of the radius is seldom needed as there is no real shortening, there being merely a crushing upward and backward. The reduction is usually a very simple procedure, but the maintenance of proper apposition is difficult when there is either comminution or much crushing of the

posterior cortical bone. Should difficulty be encountered in reposition of the parts, traction is made with the hand-shake grasp, then acute flexion and rotation, with the thumb of the other hand pressing downward and forward against the lower fragment, while the fingers of the grasping hand push backward upon the upper fragment. In the "reversed fracture" the manipulations also are reversed to produce reduction. Impaction is easily broken up and in simple transverse fractures, with little crushing of the cancellous bone, the reduction is easily maintained. In very obstinate cases of malposition, Corlette makes a very small incision over the fracture and pulls the distal fragment into position with one or two sharp-pronged hooks.

After reduction, observe that the bony landmarks correspond with the normal opposite wrist with reference to the interstyloid line, the anterior radial curve, the anterior direction of the carpal articulation of the radius, the general alignment, and the return of the ulnar head to its normal position. Be sure that the radial abduction is overcome. For those fractures in which there is little crushing posteriorly and in which the lower fragment does not tend to rotate posteriorly, with no displacement, a straight, properly padded wooden splint may be used. However, in most cases and especially in those where, after reduction, there is a triangular gap posteriorly between the fragments due to the crush of the injury, the hand should be dressed in slight adduction, the wrist in flexion. If this is not done, although the fragments will remain in reduction, the lower fragment will be subsequently rotated posteriorly by the extensor tendons of the wrist and hand until it falls into this open triangular gap, with a consequent change in the articular surface. It will then look distinctly backward instead of forward ( $10^{\circ}$ - $20^{\circ}$ ) as it normally should. At the same time the hand will be abducted and the radial styloid pulled up for the same reason.

With the hand adducted and pronated and the wrist flexed to the proper degree (determined by the fluoroscope, if possible), otherwise to at least  $45^{\circ}$  and better to  $60^{\circ}$ , an anterior moulded plaster of Paris splint, reaching from the metacarpophalangeal joints to below the internal condyle, is applied, and a last look taken through the fluoroscope, while any additional flexion or adduction is accomplished. At the same time, the pliable splint is pressed up against the head of the ulna to prevent its dropping as compression is also made to overcome the unusual widening between the styloids. When this splint is firmly set, a similar splint is applied posteriorly, reaching from the distal ends of the metacarpals to below the external condyle. This splint should be cut out for the prominence of the ulnar head. The splints should not overlap at the sides and should be bound upon the limb with gauze bandages. When pressed together above and below the thumb and fingers of the surgeon,



the splints should be loose enough to spring somewhat together, in which case the dressing is in all likelihood not too tight. An anteroposterior and a lateral x-ray view should now be taken.

The patient should be instructed to begin at once to use his fingers and thumb in the piano playing movement. The forearm should be carried in a triangle sling. The dressing should be inspected or a reliable report made upon it at the end of 6 hours, at which time attention should be called to any undue swelling, cyanosis, tingling, numbness or pain. A fracture properly reduced should become increasingly comfortable. The pressure spots likely to cause pain are over the lower fragment, over the ulnar head, and at the base of the second and third metacarpals.

The importance of early and complete reduction, upon deformity and function, is shown statistically by Hitzrot and Murray. Their figures indicate that complete reduction within 6 hours results in practically complete restoration of function, while a delay of 12 to 24 hours materially impairs the final functional and anatomic result. Late incomplete reduction is invariably responsible for moderate or marked deformity and greatly limited usefulness of the part, as well as a painful wrist.

The posterior splint should be removed on the third day and the part inspected, gently rubbed and the skin cleansed with alcohol. At the end of a week, both splints may be removed and with one hand grasping the fracture site, as a collar, the other gently moves the patient's hand upon the wrist, in flexion and abduction through an arc of  $30^{\circ}$ . Slight rotation,  $10^{\circ}$  to  $15^{\circ}$ , should be tried at this time. These procedures should be carried out every second or third day together with massage, gradually increasing the extent of the motion, and, after 10 days, active wrist motion may be allowed at the time of the dressing. After 12 to 14 days, the posterior splint may be removed and a straight anterior or palmar splint applied. When 3 weeks have passed, this may be removed and a short cardboard, or light wooden splint may be placed on the posterior aspect, reaching from the distal end of the metacarpals to halfway up the forearm; this allows a moderate degree of pronation and supination, and also permits freedom of the hand to grasp light objects. After 4 weeks, all splints may be removed and merely an adhesive collar placed around the wrist for support. Throughout the course of treatment attention must be given especially to thumb motions and to rotation of the forearm, as these are the most difficult motions to restore. Pain should never be caused by the manipulations. Full return of function should not be expected for 8 weeks to 6 months.

The economic importance of physical therapy is well shown by Wainright. His figures demonstrate a decrease in the period of disability of cases receiving physical therapy, as compared with those

that did not, as follows: humerus, 28%; radius, ulna or both, 16%; femur, 25%; tibia, fibula or both, 24%.

Many writers advocate removal of splints in 2 to 3 weeks, but this is a little too radical and in general hands may occasionally result in disaster. The splints are not the cause of subsequent deformity and stiffness; these complications are caused by failure to obtain perfect reduction or, later, to give massage and motion. Function is what is wanted first and anatomic perfection second. The more nearly perfect the reduction obtained, the more likely is perfect function to be the reward. Yet in some instances where the comminution, the age of the patient or other local injury prevent a perfect reduction, the patient may have almost perfect function.

*Prognosis:* Under proper care, the prognosis of basal fractures of the radius is excellent, provided arthritic changes are not present or do not appear. Nonunion is unknown. Interference with bone growth in young patients does occur. It may be in the nature of overgrowth or of arrested growth, with early complete ossification of the conjugal cartilage. The deformities that are likely to occur are: abduction of the hand, broadening of the wrist, weak internal lateral ligaments, flattening of the ulnar prominence, chronic subluxation and slipping of the ulnar head associated with some ulnar disturbance, persistent rotation of the lower fragment resulting in too pronounced prominence of the back of the wrist and abnormal direction of the carpal articular surface of the radius, a weak inferior radio-ulnar ligament, a flattening of the radial arch, and occasionally a slipping of the extensor carpi ulnaris tendon around the ulnar head in extreme flexion.

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## FRACTURE OF THE WRIST.

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F. W. SHAFER, M.D.

(Presidential address, delivered at the Annual Meeting of the Camden City Medical Society, Jan. 6, 1925.)

The subject of "Fractures of the Wrist" has been selected for the address because of anatomic and functional results occasionally seen. Consideration of the subject will be limited to the lower ends of the radius and ulna, because breaks in this region make up about 5% of all fractures, since the era of the automobile.

By Colles' fracture we mean any fracture occurring within 1½ inches of the lower end of the radius; Barton described a fracture involving the wrist joint, and Smith's fracture, a type seldom seen, is a displaced forward fracture.

We can classify three life periods, relative to wrist fractures: The first is that of development (up to 20 years of age), when the most important part of the lower end of the radius is the epiphysis. This may be displaced, instead of breaking the bone. If not properly reduced, growth of the bone stops and this causes marked deflection of the hand to the radial side, which increases until the ulna has attained its full length. In the second period (20 to 40 years), that of greatest development, the bones have reached their full growth and no developmental changes result. Injuries at this time usually result in a fracture about  $1\frac{1}{2}$  inches from the joint. In the last period (40 years on), senile changes are seen, and fractures usually extend transversely about  $\frac{3}{4}$  inch from the joint and are often complicated with avulsion of the ulnar styloid, posterior displacement, or impaction.

In 1814, Colles differentiated fractures of the lower end of the radius from backward dislocation of the wrist. In fractures resulting from indirect violence, the bone is twisted off, the soft structures torn, and the condition is more serious than those due to direct violence.

No treatment of wrist injury should be begun until an x-ray examination has been made. It is better, however, to treat a fracture which is not present than fail to treat one that is present. It is better to recognize and make a mistake in treatment than not to recognize a fracture at all.

The fracture should be reduced immediately, if necessary under an anesthetic. No amount of splinting will take the place of an incomplete and imperfect reduction. An impacted fracture with good alignment and no deformity can not be left alone; the impaction should be broken up and crepitus obtained by increasing the fracture, making sure that the radial end is beyond the ulna and that it lines up with the long axis of the shaft of the radius.

Any kind of splint may be used which keeps the fragments in good position, with the hand in ulnar flexion. The older the patient, the sooner the splints should be removed. Each fracture should be treated individually. Usually, splints may be discontinued after 3 weeks, and then massage, active and passive motion, and baking may be started, so that normal function may be restored about the end of the fifth week.



## POSTOPERATIVE PULMONIC EMBOLI.

G. K. DICKINSON, M.D.

(Read at a meeting of the Osler Medical Society, Jersey City, Nov. 19, 1924.)

"Vincent Rich, one of Madera County's oldest residents, passed away at the Madera sanitarium Tuesday night at midnight, after a fatal collapse, following a successful operation."

This slighting remark is not uncommonly heard, particularly in after-dinner talks and when we meet members of another profession by the wayside. The man on the fence thinks he can play the best game of ball, and, as the public judge us by our results only, and take but a superficial view of happenings, perhaps we should expect unkind remarks when we have failed and a life is lost.

From all time, we have had the competent and incompetent surgeon. We have had the man who operates for health and the one who operates for wealth. The mortality statistics in the past, as well as in the present, vary according to the care given the patient. In major operations fifty years ago the mortality was about 70%. We have knowledge, however, of men who were trained to a type of care and self-repression whose mortality was very much lower.

Every operation is a sin to the economy, for it opens a pathway of danger, and no operation is so slight but that it has its fatality. We have studied the dangers of abdominal section and find at least 27 different avenues leading to a fatal termination. It has been and is the province of the surgeon to eliminate each one of those paths as far as possible.

Over a hundred years ago there was a man named Charles White, of Manchester, England, who in early life was trained to immaculate cleanliness. He was an obstetrician. Soap and water was his faith, and when others were having a 20% death-rate from confinement, his was but 4 or 5. Semmelweis, of Vienna, when the puerperal death rate was appalling, reduced it to about 6%, with cleanliness and chlorinated lime. But, work done more than two generations back is forgotten and medicine has to be discovered over again in order to impress the present day practitioner; so, to us, Lawson Tait becomes an apostle of cleanliness. His sole armamenta was soap and water, but man's nature craves the mystical. He tends toward the ceremonial rather than the practical, so when Lister came with his spray, (used in the operating room before the operation and on the patient at the time), and his irrigations of carbolic acid solution and elaborate dressings of gauzes

thickened with resin, (next to the skin the green one containing salt of lead, and between the two outer ones oil-silk), it all appealed most strongly to the imagination. Not so at first in England, where there were jealousies and strong reactions. Germany took it up with marked interest. It then passed over to France, then to America, and back to England, so that Lister, who at the time he first elaborated his technic was nearly displaced from the hospital, was ultimately knighted by the king. Even then, there was strong antagonism between those who practiced Lister's ceremony, and Gamgee who obtained equally good results with his massive cotton, and Tait with his soap and water.

Gradually, one unnecessary detail after another fell into disuse, so that today we are not disciples of Lister, but disciples of Lawson Tait. But this warfare, with the further knowledge of the causes of trouble, has permitted the profession to eliminate one scourge after another. The surgeon of the present day has never seen hospital gangrene. We doubt if he has seen postoperative erysipelas. Pyemia, as well as sepsis, is to be found only in our dictionaries. Laudable pus and comfortable suppuration are unknown. Primary healing of wounds and smooth convalescences, low mortality and morbidity, are the rules of today.

Surgery seems to be passing from the man of skill and *bravery* to the common ranks, where *bravado* prevails.

With all our knowledge, however, and with all the good results derived from advances in the art, we have still one form of death which is tragic, and which is all too often met after surgical operations, whether done by the skilled or those who lack it. As the obstetrician has so far failed to reduce his mortality below a certain figure, so the surgeon has failed to eliminate it as a cause of death. We speak of emboli, which pass from the region of operation and lodge in the lung.

We will consider that operations are largely conducted under ether anesthesia. This is often forgotten in ciphering out operative statistics. In the early days, when this type of death occurred, we said that the heart had failed, and satisfied ourselves with that explanation.

Ether, being impure, not infrequently the patient would drown in his own pulmonary exudate within a few hours after the operation, bloody froth coming from the nose and mouth; so ether was blamed for these sudden deaths. The anesthetist, curiously, failed to react against this charge, and for a great many years these accidents continued to be called ether deaths, and there seemed, apparently, good reason for it. Ether when inhaled is cold and any ether anesthesia conducted for 15 or 20 minutes will produce petechial hemorrhages into the tracheo-bronchial tree. Mucus will be formed, and in those who have wet anesthesia and bring up a

vomit, it was felt there was sufficient cause for blaming the anesthetic. However, as specialists developed in anesthesia and more careful work was conducted on both sides, the conclusion became inevitable, that the fault did not lie there. It was then noted that the same thing occurred in local anesthesia and spinal analgesia.

A further evidence that ether is not a causative factor in the production of pulmonary complications is that every surgeon has at some time operated upon a mistaken diagnosis of appendicitis only to find that there was a lobar pneumonia existing, yet the anesthesia has never aggravated the pneumonic process. The only dangers coming from ether are through that organ which is always soaked with blueblood and gets but little oxygen, the liver, through the production of acidosis and hyperglycemia.

Anatomists and surgeons have laid stress on the arteries. Almost all works on surgery teach us how to find the artery and tie it off. The ligations that are done are on the arteries. The venous and lymphatic systems are neglected. Wherever there is inflammation there will be a thrombus of the veins in the neighborhood. Traumatism or bruising, anything or any condition which will expose the vein tends to produce a phlebitis, to which will come the platelets, the leukocytes, and the fibrin, and a clot will form. If the condition be pyogenic, the clot becomes infected, tends to soften down and become abscessed. If it be nonpyogenic, it will tend to adhere and become fibrotic. One great predisposing cause to this condition is sluggish circulation. The slower the circulation, the more extensive the blood-clot. It is easy to understand how a soft blood-clot, if not firmly attached to the walls of the vessel, may become dislodged as the circulation returns with greater vigor. Wherever the circulation is apt to be disturbed by sudden or excessive motion, there the blood-clot will be prone to separate and pass into the stream, venous or lymphatic; for example, in the big saphenous vein close to the femoral, the ceco-appendicular region, and upper abdomen.

Clinically, this calamity may occur any time from the second day to the end of the sixth week. A soft clot, particularly one that is softened by infection, may enter the blood or lymph stream during the first week. The majority of the blood-clots loosen up about the thirteenth day. Statistics vary, and for this reason are valueless. Almost all cases occurring in the first week are fatal. The further away from the date of operation, the better the chances. A patient having had one attack is potential for another. Before the onset, a low evening fever continued is significant. There is septic thrombophlebitis somewhere, and the possibility of embolus should always be considered in these cases. If the embolus be large and pass to the large vessels in the lung, the attack will be sudden. A patient seemingly in normal condition, perhaps ready to get out of



bed and thinking of going home, suddenly becomes breathless, cyanotic, restless, complains of pain in the chest, the pupils enlarge, there is a cold sweat, he becomes unconscious, and dies. If the clot be small, or there are showers of small emboli, perhaps a small branch will be closed and an infarct produced in a small area of the lung. The patient has a sudden sharp pain in the chest, not characterized by depression or cough or marked elevation in temperature. On the next day we find a friction rub with perhaps some impairment in the percussion note, with râles and changes in the breath sounds. This condition may be discovered by x-ray, and generally passes off in a few days.

There is no surgeon but who has had some such experience, and there is no tragedy which goes to the heart as does this. The books state the death rate from anesthesia is about 1 to 6000, but statistics are not dependable, for they must be changed from time to time as our knowledge increases and varies. The mind of the profession being so strongly on sepsis and other complications that have come to us through the literature and through experience, has failed to keep record of the embolic calamities, but it is surprising how often this condition does occur. There are many cases of thrombus and infarct which are passed over as not being significant because they did not add to our worries. According to Wheaton and Pearson, 40% have been diagnosed as pleurisy and 12% as bronchopneumonia, which were really instances of pulmonary infarct due to embolism.

According to Lee, 1 in every 50 patients operated upon developed a pulmonary complication; 1 in every 150 to 175 died. The morbidity being 3 to 4%, and the mortality 0.6%. Mandell reports a mortality of 8% in operations upon other parts of the body and 14% after abdominal operation. Out of 13,000 postoperative cases, Rupp found 5% had demonstrable embolic infarcts of the lung. Playfair collected 25 cases of embolus of the pulmonary artery occurring in women after delivery; generally before the fourteenth day.

In our own work, taking the last 1000 operations, which are of all types, we have had 8 such cases:

No. Opr.	Name	Operations	Days after
10,316	Mrs. R.	Appendectomy	7
10,168	Mrs. D.	Appendectomy with drainage	2
10,079	Mrs. R.	Celiotomy, exploratory, for carcinoma peritoneum	3
9960	Mrs. G.	Celiosalpingotomy	8
9674	Mrs. S.	Celiohysterectomy for carcinoma cervix	4
9516	Mr. B.	Appendectomy with drainage	28
9506	Mr. H.	Celiotomy, exploratory, for retroperitoneal carcinoma	?
9469	Mr. K.	Cholecystectomy	23

The lesson to be derived from this study is that the veins and lymphatics should be respected. It is said that 5% of all appendicitis

cases are associated with septic thrombus and phlebitis. The appendix is removed, but it is impossible to remove the bed. So-called drainage will not suffice. Rude surgery, much manipulation, punching with gauze to wipe out clot or exudate, are all evils, more or less necessary. Aspiration of pus and blood is far better than the punching in of gauze sponges by the assistants. A proper regard for veins and venous channels, a greater effort to avoid interference with the flow of blood through the veins, then that which will stimulate the flow of blood, will help to curtail these tragedies. We are told that the patient "who is as good as gold" runs a greater risk than one who is restless. The Zurick school, who get their patients out of bed by the third day, claim they have no such calamity, while White of Birmingham, who gets his obstetric cases up to urinate 4 hours after confinement and out of bed by the third day, does not speak of this accident.

Are we not chained to ritual? Are we keeping our patients too quiet, too long in bed, thereby diminishing the flow of blood? If we have conquered everything but thrombus and phlebitis, and its associate, embolus, is it not well that we make further effort in our care in order to reduce mortality from this great misfortune?

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## HUMAN NATURE AND THE PERSONAL EQUATION IN THE PRACTICE OF MEDICINE.

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B. B. RANSON, JR., M.D.

Maplewood, N. J.

(Read before the Orange Mountain Medical Society, Jan. 16, 1925)

In relinquishing the office with which you honored me by election one year ago, let me assure you, not in a perfunctory fashion, but in all genuine sincerity and from the fullness of my heart, of my deep appreciation of this distinction. To have served as president of this organization, has been counted as one of the great honors obtainable. In the 22 years of association in daily work and contact with the individual members, many of whom I claim as warm personal friends, and in the attendance on meetings of this society throughout the greater number of these years, my affection and loyalty to the Orange Mountain Medical Society have steadily enhanced. To my mind, this group of men typifies the finest body of representative, able, conscientious and honest medical practitioners to be found in all the land. From experience, and talks with men in many other parts of the country, my conviction has been that the combined Mountain Medical and Practitioners' Society commands a

unique and enviable position as to its good fellowship and social perquisites, as well as to its scientific and intellectual aspects.

An individual's success in medical endeavor depends on a variety of factors. Primarily, he should possess a comprehensive groundwork of knowledge acquired by study during the medical college period. This, in turn, is supplemented by clinical experience derived from hospital internship and attendance upon clinics. Together with which, participation in the deliberations of medical societies, such as this one broadens his comprehension and point of view. These sources supply a basic foundation of equipment, upon which is developed the intelligent application of the wisdom thus acquired, to the treatment of individuals whose normal well-being has been deranged by disease. In order to successfully accomplish such an object, a knowledge of human nature is essential and indispensable. The attempt to employ a given procedure or remedy for the relief of a specific ill, without most careful consideration of the human personal equation represented, may often be attended by failure. Knowledge of the temperament and psychology of one's patient is sometimes more important than an understanding of his disease. Ability to read character correctly, sympathetic understanding of the patient's point of view, and the faculty of individual analysis are acquired by experience in the school of life. Attainment of these attributes comes naturally to some men; by others, its importance is disregarded and the aid given to humanity may be measured accordingly.

The young man who selects a medical career, after spending 4 years in college preparatory study and 2 years in hospital service, emerges at the age of 28 to 30 years, ready for his life work. His brain has been taxed with a great wealth of knowledge pertaining to all branches of the profession. He has yet to realize that much of what he has learned may be of little practical use. There will await his discovery many facts of vital importance, which have not been taught to him. The most highly prized and valuable single asset in his profession should be a large measure of common sense. If he possess this in sufficient degree, his success is assured.

In the rapid progress of medical discoveries and in the immense potential developments of each succeeding year, it becomes increasingly difficult for any one man to maintain close contact with all angles of the various branches of medicine. As a consequence, the selection of a specialty within limited specific fields, is becoming more generally adopted. The novice in medicine is inclined to bend his energies in narrower, restricted channels, with greater concentration along the lines of his special endeavor. Toward acquiring increased proficiency, his dispensary and out-patient hospital service supplies ample material for study, research and practice in his field. The enthusiasm engendered and skill developed,



with experience, combine to perfect a mastery of his line. In time, the factors pertaining to other departments, become less emphasized in his perspective. In his observation of the individual, the features pertaining to his field, may be accorded greater emphasis, and some equally essential fact outside, may escape observation. The man who has had previous experience in general medicine is responsive to the more comprehensive impressions and takes a broader view of his case. There are arguments in favor of ones restricting his work to special lines at the commencement of his career, but the man who has had some years of experience in general work before taking up his specialty, is likely to be of greater help to those receiving his attention.

It is sometimes difficult to differentiate real from imaginary ills. The neurotic, introspective, self-analytic type of man or woman, who is fearful of having a serious malady, is in greater need of words of assurance than of therapy. It may be difficult to determine if there be a basic cause for the symptoms recounted. It is not enough to dismiss this type, with the assumption that there exists no real derangement; this conviction should be reached only after a thorough and painstaking analysis of the individual problem. A hurried sketch of history, a superficial physical examination, a failure to elicit the essentials, or to employ all of the numerous modern methods of aid in diagnosis, may lead one to incorrect conclusions. It is this failure, on the part of the doctor, to do full justice to a given case that sends a great number of people to seek aid of the vast horde of charletans and imposters who do business under the guise of every conceivable cult and quackery.

The reason for most failures in diagnosis, and consequently in treatment, is to be found in the insufficient time accorded to analysis of the given case. The man who is rushed and overworked, whose waiting rooms are crowded, often misses the key to solution of the case before him. Most of the problems of daily office routine are of minor importance and can be handled expeditiously, but there are others requiring the utmost careful study and a proper time and suitable arrangement for giving this should always be made. The doctor who is capable of great concentration and who possesses sufficient vision and judgment to select those cases requiring further investigation and who makes it possible to give such necessary attention, will be rewarded by the greatest measure of genuine success, in terms of rendering real service and he will also derive the greater joy of personal gratification.

Because every branch of medical work is becoming so extensive and comprehensive, it is no longer possible for any one man to cover general practice completely. The man who has years of experience, who employs all of the agencies of modern development, the technical performance of which may be accomplished by a

number of different workers, and who analyzes the results of the various examinations and interprets them in conjunction with his own physical examination and in the light of his superior knowledge, is still the best man to treat a sick individual. No group medical plan can quite replace the personal service of such men. It is the human contact and personal relationship of the physician which means so much and always will appeal to the average person. Detached routine examinations by a number of different men, frequently done mechanically and usually impersonally, fail to register the human appeal. Success, and advantages from the standpoint of a business system, have great possibilities. Achievement of a more comprehensive analysis within a limited time and in one place, and the attainment of a correct diagnosis, has much to recommend it. The application of the information thus required in the treatment and subsequent care, again loses something irreplaceable; the human relationship and personal contact. The privileges and facilities of our hospitals of today serve to combine the good feature of groupworking and at the same time retaining the personal element. The opportunity afforded for intensive study and making a proper survey is greatly facilitated by a period of observation. The many comprehensive problems of living under the conditions of our modern high pressure civilization have increased the demand and scope of institutional medical work. The uncertain status of domestic life, the economic problems involved, the increase in the number of dwellers in apartments, the better appreciation of the need for skilled care, are a few of the factors involved. As a consequence, many more people are willing to go to the hospital for medical, obstetrical, and surgical attention. It is therefore a less difficult problem now than formerly to induce one to go for a few days of observation.

The close relationship existing between the various men, working in the hospital, makes it feasible to suggest and secure the consultation and opinion of one's fellow workers. The suggestion of having additional advice, emanating from the attendant himself, has a great moral value and, as a rule, increases the respect and confidence of the patient and family. It is probably the experience of all of us that the family is of far greater trouble and presents more difficulty in handling than the patient. The anxiety of the worried, harassed mother; the anguish of the alarmed wife or husband; the dread of impending danger to a loved one, by various members of a family; all combine to create a spirit of uneasiness and fear. This finds expression in innumerable questions and solicitous inquiry which are centered on the men who are in attendance and whose every effort is being made to control the progress and destiny of the patient's disease. These have to be met with sympathetic understanding and tolerance. Honesty of purpose and frankness in

expression of the true condition of affairs, is always desirable. It is usually appreciated by those most interested and enhances the confidence inspired. The amount of real information to be imparted to the patient depends entirely on the individual, and here the greatest need for tact and diplomacy is required. Even in face of the gravest potentialities, the inspiring of hope and confidence may turn the tide of battle in favor of a successful issue. Optimism is a most valuable aid; it may sometimes lead to disappointed expectations but it is a strong weapon of defense. The man with a smile will accomplish greater good than the fellow with a frown. One may not always feel his apparent optimism justified, but the spirit is infectious and the effect inspiring and stimulating. I well remember one of the earliest of the seriously ill cases coming under my care. The patient was a man with a serious acute heart condition. His family had abandoned hope of his recovery; the patient was resigned to die; and, the entire atmosphere of his environment was depressing and discouraging. There was something in the man's condition which made me feel that he still had a chance for recovery although his prognosis was distinctly bad. He was told quietly and firmly that if he made the fight he would get well. He did; much to my surprise. Each summer I see this man sailing his boat down off the coast of Massachusetts and am always reminded of the value of never admitting defeat.

A good fighter who will not give up until he has made use of every known means at his command, and who will stand by until the last, will often be rewarded by success. This is the type of medical practitioners who comprise the membership of the Orange Mountain Medical Society. The value of inspiration and hope derived by a patient from his doctor, is often of greater weight in deciding his progress than the specific measures being employed. Optimism is infectious and, if apparent in the medical man, his patient will more readily assume the aspect of hopefulness and profit in accordance. The sphere for rendering aid to sick and discouraged individuals in many ways by the power of moral influence and suggestion, is very great. There are a great many people who place such implicit confidence in the advice and counsel of their chosen physician that his words carry inestimable comfort. It would not be amiss for some of us to take a leaf from the book of Christian Science in these matters. One of the greatest rewards a man receives from his routine contacts in daily work is the splendid friendships developed. Not alone in the material evidence of appreciation by grateful patients, but in the richer joy of comradeship and intimacies with those whose inner lives are laid bare to our eyes. On the other hand, it is true that sometimes our closest friends take advantage of this relationship and are inconsiderate in their demands.



Many capable men limit the sphere of their usefulness by *worry* over their cases and depression from the discouragement of losing a patient. When one has done his utmost to win a victory and his conscience is clear, with the conviction of having exhausted every known means to achieve a triumph, and still has his efforts fail, such defeat should be accepted with stoicism. He may at least have acquired some knowledge in the experience which will better enable him to meet the next battle. One of my classmates was a most promising aspirant in the field of surgery. Early in his career, the loss of an important case so discouraged him that he gave up surgical work entirely, but he turned his attention to the field of pediatrics and is now one of the leaders in such work in the northwest; infant feeding has proven less harrowing than the responsibilities of surgery and is more suitable to his temperament. Another classmate, less brilliant but very capable and determined, with splendid mental poise, is now one of the most skilled surgeons in the city of Baltimore. One of the saving graces of men in our profession, is a sense of humor. Without it, how dull and uninspiring the life. In the midst of the commonplace and the tragic, some humorous incident suddenly transpires and serves to balance the picture. This is also exemplified in our society meetings and discussions, when the situation becomes tense or serious the inimitable wit and matchless humor of a Dodge or the delightful camaraderie and effusive mirth of a Freeman, will save the situation. In the reminiscence of the experiences of one's career, the humorous happenings are accorded emphasis and cherished.

We live in a marvelous age of medical achievement and progress. Each year brings under control some added disease, heretofore baffling the most aggressive attacks. Preventive medicine has been making strides of immense magnitude. From the day of small-pox control, through the period of diphtheria, malaria, yellow fever, typhoid and scarlet fever prevention; all of the unconquered diseases are receiving intensive study. The study and development of the definite control of diabetes is a story which reads like a romance. The great fight being waged against cancer, which still resists all efforts of prevention and control, may some day be crowned with victory. The study and intelligent application of the knowledge acquired of the endocrines offers a fascinating field of pursuit. The accomplishments and possibilities of surgery of today know almost no limit. In addition to the frequently invaded domains long understood and explored, the brain, heart and sympathetic nervous system are receiving attention. So, the man fortunate enough to be devoting his life work to the most wonderful of all professions, has unbounded possibilities for constructive accomplishment.

The essentials for success are: A knowledge of one's profes-

sion. Ability to render service for the benefit of humanity and not for personal advantage. Power of concentration. Honesty in relationship to associates and patients. Systematic reading and study and observation of the work of the leaders in chosen fields. Ability to smile in face of adversity and to inspire hopefulness. These attributes are exemplified in our Runyon, Harvey, Halsey and Brown, to which names could be added the roster of membership of this society.

That master philosopher of medicine, Osler, has said: "A physician may possess the science of a Harvey and the art of Sydenham and yet there may be lacking in him those finer qualities of heart and head, which count for so much in life." Let not this be said of any of us.

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#### LET ME LIVE OUT MY YEARS.

Let me live out my years in the heat of blood!  
Let me die drunken with the dreamer's wine!  
Let me not see this soul-house built of mud  
Go toppling to the dust—a vacant shrine!

Let me go quickly like a candle-light  
Snuffed out just at the heyday of its glow!  
Give me high-noon—and let it then be night!  
Thus would I go.

And grant me, when I face the grisly thing,  
One haughty cry to pierce the gray Perhaps!  
Let me be as a tune-swept fiddlestring  
That hears the Master Melody—and snaps!

—John G. Neihardt.

# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if.—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, Newark, N. J.

## IS YOUR NAME WRITTEN THERE?

During the past month the State Society has suffered the loss, through death, of several of its most prominent members. Especially notable among the departed, are: The Chairman of the Board of Trustees and former President of the Society, Obadiah H. Sproul, of Flemington; that fine example of the "old family physician" type, so much admired and respected by all of his associates, George R. Kent, of Newark; and, stricken down in the prime of his life, Edward C. Pechin, of Camden, whose popularity is well attested by the fact that he was affectionately known to most of his confrères as "Eddie". Elsewhere in this number of the Journal, we have given short sketches of their lives and have officially noted the departure of other members of the Society, less distinguished perhaps in the councils of the organization, and consequently less well known to us, but none the less to be mourned as losses to our Society membership and our personal fellowship.

Always desirous of paying an appropriate last tribute of respect to those of our fellows who are claimed by death, we not infrequently find it extremely difficult to procure any amount of accurate information concerning them and seldom can we secure that information promptly. Furthermore, even with so distinguished an officer of the Society as the late Dr. English, it was found impossible to obtain a suitable photograph for reproduction in the Journal.

It is suggested that now would be a good time to organize a new bureau in this office—a bureau wherein shall be kept in readiness for use at any moment a biographic sketch of every member of the Society, together with a photograph of the individual. The Journal of the Society would seem to be the proper depository for such biographies, and



both the reading matter and the photographs can be readily kept up to date by periodic revision and renewals. Every important newspaper in the country maintains such a cabinet file of prominent citizens of the community, and the Journal of the American Medical Association keeps a similar record of prominent members of the medical profession. Would it not be well to establish here a complete record of our own members, not to be used solely for obituary notices but available for use on any occasion that warrants publication, such as an election to Society or to public office, or the receipt of other specific honors?

The Editor will very willingly undertake the care and proper arrangement of such biographic material, and herewith requests each and every member of the State Society to supply him immediately with a brief sketch of his life and accomplishments, and a copy of his most recent and handsomest photograph. Please send *yours* now, to inaugurate this collection.

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#### THE APPROACHING ANNUAL MEETING.

The Committee of Arrangements reports that practically all details of the advance preparations for our annual meeting, to be held in Atlantic City, June 18-19-20, have been completed. The Chairman of the committee, Dr. M. W. Reddan, is striving particularly to develop a new plan whereby the scientific and business sessions shall not be permitted to interfere with each other; insofar as possible, business matters will be disposed of at stated hours and the time fixed for the presentation and discussion of scientific papers will be strictly adhered to, so that chosen essayists may feel assured of due and proper consideration. There is no doubt that, with a proper allotment of time, this plan can be managed without detriment to the necessary business functions of the organization.

Entertainment is being provided in abundance and on a scale that promises much enjoyment. Special provision is being made for the ladies and it is hoped that our members will take advantage of this opportunity to bring their wives and daughters to the seaside for a restful and enjoyable week-end vacation.

One word of caution is necessary; make your hotel reservations now, as it is expected that all previous attendance records will be broken at the coming session.

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#### MEDICAL BILLS IN THE LEGISLATURE.

It has not seemed opportune to report on the work being performed by the Welfare Committee while that work was in an unfinished state, and particularly while some of the matters with which the committee is most deeply concerned are before the General Assembly. Next month we shall probably be able to make a definite report on the labors of the

committee and the results thereof. For the present, those members of the Society who are not in close association with members of the committee will have to accept our assurance that, under the chairmanship of Dr. McBride, the committee has been most active and industrious all winter.

In addition to the so-called "Doctor's Bill", which the committee introduced into the Legislature, several other bills having some medical bearing have appeared. Of course, the Chiropractors have presented their old appeal for a separate board of examiners; the Birth Control bill is receiving a deal of attention; the old bill providing for the castration of certain mental defectives has reappeared, though not under the auspices of the medical society; and, the Board of Medical Examiners are advocating two amendments to the present act regulating medical practice. We shall discuss them all at another time.

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#### PROGRESSIVE LEGISLATION.

Among the recent Literary Digest clippings was the following gem from the Detroit News: "For some reason, the idea of most legislators is that if people break a law the only thing to do is to pass another."

The first impression produced on reading this squib is that it is humorous, but a little deeper thought reveals a serious background to the joke. It is scarcely fair to place upon legislators all the blame for the present deplorable state of affairs existing throughout the country for, after all, members of any State Legislature are but average representatives of the community who have been assigned by that community to the temporary performance of certain duties, and one cannot sit through a session as an interested spectator without developing a certain amount of sympathy for these harassed law makers. A very large percentage of the proposed new laws are presented "by request" and because of the insistence of constituents. That there is an enormous waste of energy and money and a frightful insult to the State in the amassing of all this legislation, there can be no gainsaying. The Newark Evening News presented a few days ago an estimate that there are under consideration at this moment in the various state legislative bodies no less than 20,000 proposed new laws and that probably about 7000 of these will actually be enacted into law. In our own State of New Jersey, the present session of the Assembly has already witnessed the introduction of 755 new bills. It is a trite observation that much of the legislation finally adopted in any State is ill-considered, ill-advised, at conflict with existing law and custom, and serves no useful purpose. We are all too much influenced by the notion referred to above, that by adding a new patch to the old law we can reform society and correct existing evils. Another estimate, recently published under governmental authority, states that there are on the statute books of the nation and its 48 com-

ponent states approximately 2,000,000 laws.: Think of it; and while thinking, remember that it is axiomatic in court rulings that "ignorance of the law excuses no one" for violation of the law. Does anyone suppose for a moment that even so brilliant a legal mind as that of Rufus Choate could have comprehended all the law of this country?

To put the question more specifically and to bring it forcibly home to ourselves, does anyone believe that there is a physician practicing in this State of New Jersey who *knows* all the law relating to the practice of medicine in this State? It is a safe bet that there is no such person. Indeed, it is a well-known fact that even the two most interested groups within our professional ranks, the officers of the State Medical Society and the officials of the State Board of Medical Examiners, are not in agreement about what should be a fundamental matter in medical law—the method of procedure in the examination and licensing of candidates for the right to practice. If they cannot agree in the interpretation of a law which they were jointly instrumental in making, and amending, what is the chance of the less actively interested individual understanding that law? Yet we, as an organized body, are as guilty as other business or professional groups of the sin of seeking to add more patches to the "crazy quilt design" of existing statutory provisions.

The medical profession is often called a learned profession. Some of us are intelligent, some are educated, some are both, perhaps some are neither; but, at least, the average of intelligence and of educational attainment is as high in this profession, as a whole, as it is in any other collective body of citizens. Is it not time for us to call a halt on this continuous procedure of adding more law to existing law; a process that is resulting simply in confusion worse confounded? May we not set an example to other learned bodies by using our intelligence toward the improvement and simplification of legal conditions governing and restricting our work? Would it not be wise for us to take a year, two years, five years if necessary, for the codification of our own laws, for comparison of the laws of this state with those of other states and of other nations, with the object and with the hope of evolving some definite set of laws, carefully coördinated, that shall replace the present hodge-podge with legal rules that shall be fair and liberal to all who desire to participate in the alleviation of human ills, that shall be concise and understandable in their language, and practicable in their application, and that shall safeguard the interests of suffering humanity?

We should learn something from and profit by the experiences of the past. The haphazard course heretofore followed cannot be pursued much further without leading us into serious complications. Let us consider the situation carefully, determine upon a positive goal of desired attainment, and then steer a definite course toward our fixed end.



## Communication.

### LETTER FROM SECRETARY MORRISON.

I have made arrangements with the Trunk Lines Association for reduced rates to our State meeting at Atlantic City in June. The rate will be a fare and a half. This reduced fare can only be obtained by asking the railroad agent at your station for a Certificate, and this must be done a half hour before your train starts.

Instructions from the Trunk Lines Association are herewith presented.

In connection with this reduced fare, three things are important to remember:

- (1) Be sure to ask for a Certificate when purchasing your ticket.
- (2) Certificates are not kept at all stations. Talk to your station agent beforehand.
- (3) See that you have Dr. Wm. Carrington, at the Registration Bureau, endorse your Certificate.

#### RAILROAD INSTRUCTIONS.

Suggested advice to members of the organization respecting reduction authorized on the Certificate Plan for benefit of members and dependent members of their families.

A reduction of one and one-half fare on the Certificate Plan will apply for members attending the meeting of Medical Society of New Jersey, to be held at Atlantic City, N. J., June 17-20, also for dependent members of their families, and the arrangements will apply from the following territory:

From points in New Jersey, also New York, N. Y., Philadelphia and Easton, Pa.

Children of 5 and under 12 years of age when accompanied by parent or guardian will, under like conditions, be charged one-half of the fares for adults.

The following directions are submitted for your guidance:

1. Tickets at the regular one-way tariff fares for the going journey may be obtained on any of the following dates (but not on any other date), June 13 to 19. Be sure that when purchasing going ticket you request a CERTIFICATE. *Do not make the mistake of asking for a "Receipt".*

2. Present yourself at the railroad station for tickets and Certificates at least 30 minutes before departure of train on which you will begin your journey.

3. *Certificates are not kept at all stations.* If you inquire at your home station, you can ascertain whether Certificates and through tickets can be obtained to place of meeting. If not obtainable at your home station, the agent will inform you at what station they can be obtained. You can in such case purchase a local ticket to the station which has Certificates in stock, where you can purchase a through ticket and at the same time ask for and obtain a Certificate to place of meeting.

4. *Immediately on your arrival at the meeting present your Certificate to the endorsing officer, Dr. W. J. Carrington, Corresponding Secretary, as the reduced fares for the return journey will not apply unless you are properly identified as provided for by the Certificates.*

5. It has been arranged that the Special Agent of the carriers will be in attendance on June 19 and 20, from 8:30 a. m. to 5:30 p. m., to validate Certificates. If you arrive at the meeting and leave for home again prior to the Special Agent's arrival, or if you arrive at the meeting later than June 20 after the Special Agent has left, you cannot have your Certificate validated and consequently you will not obtain the benefit of the reduction on the home journey.

6. So as to prevent disappointment, it must be understood that the reduction on the return journey is not guaranteed, but is contingent on an attendance of not less than 250 members of the organization at the meeting and dependent members of their families, holding regularly issued Certificates obtained from ticket agents at starting points, from where the regular one-way adult tariff fares to place of meeting are not less than 67 cents on going journey.

Certificates issued to children at half fares will be counted the same as Certificates held by adults.

7. If the necessary minimum of 250 Certificates are presented to the Special Agent, and your Certificate is duly validated, you will be entitled up to and including June 24, to a return ticket via the same route over which you made the going journey at one-half of the regular one-way tariff fare from the place of meeting to the point at which your Certificate was issued.

8. Return tickets issued at the reduced fares will not be good on any limited train

on which such reduced fare transportation is not honored.

9. *No refund of fare will be made on account of failure to obtain proper Certificate when purchasing going tickets, nor on account of failure to present validated Certificate when purchasing return tickets.*

### CORRECTION.

In Dr. B. L. Bryant's paper in the February issue, on page 38, line 20, should have read 59 per cent. instead of 95 per cent.

### FORTY-SECOND ANNUAL REPORT.

#### The Society for the Relief of the Widows and Orphans of Medical Men of New Jersey. Nineteen Twenty-Four.

Your Board of Trustees in presenting the forty-second annual report has only a very uneventful year on which to comment. The routine work of the Society has been carried on, benefactions have been distributed to several living beneficiaries, our funds have been carefully attended to and death claims have been promptly paid on receipt of satisfactory vouchers.

Ten of our members have died. Drs. F. R. Bailey, H. C. Bleyle, J. J. Broderick, T. E. Dolan, A. C. Dougherty, G. B. Gale, G. E. Reading, G. A. Rogers, J. P. Rohn and J. Walters, and eight were dropped from the roll for failure to pay assessments. Nineteen new members were elected and one re-instated.

Our present membership is 474.

Our Permanent Fund continues to show a healthy growth and now amounts to \$32,154.20 yielding an income of \$1,310.31.

Death claims for the year aggregated \$3,956 and our expenses amounted to \$526.75. During the year \$500 from the Contingent Fund has been transferred to the Permanent Fund.

Your Board has, at its meetings, carefully discussed the Executive problems which come to its attention, such as possible changes in the manner of adjusting death claims and the questions modifying our admission requirements but no satisfactory reasons for altering our present procedure have yet been presented.

During the year an investigation of our mortality records have been made, with the kind assistance of the Actuarial Department of the Mutual Benefit Life Insurance Company and this will, in due time be placed before the members of the Society. At present the report is incomplete and deserves further study, but suffice it to say that considering the Society as a friendly coöperating union, and also that no medical examination is required for admission, our experience is not unfavorable. (See Dr. Bennett's paper in this issue of the Journal).

#### Summary of Report of Treasurer

##### RECEIPTS

Amount received from assessments, initiation fees	
Balance on hand May 1, 1923	\$ 319.95
and interest	5,563.61
	\$5,883.56

##### DISBURSEMENTS

Incidental expenses.....	\$ 526.75
Claim of Dr. T. E. Dolan..	369.00
" " Dr. John Walter..	366.75
" " Dr. F. R. Bailey..	366.00
" " Dr. A. C. Dougherty .....	365.25
" " Dr. George B. Gale	364.50
" " Dr. G. A. Rogers.	363.75
" " Dr. H. C. Bleyle..	353.25
" " Dr. John Rohn..	349.50
" " Dr. Geo. Reading.	338.25
" " Dr. J. J. Broderick	311.25
" " Dr. Jas. Douglas.	159.00
" " Dr. E. B. Grier...	72.73
" " Dr. Carl Sutphen.	64.50
" " Dr. D. W. Case...	30.00
" " Dr. W. F. Faison.	28.50
" " Dr. Benj. Voelbel.	14.25
" " Dr. F. C. Thornley	12.00
" " Dr. H. A. Stout...	6.75
" " Dr. W. S. Disbrow	6.00
" " Dr. M. R. White-nack .....	3.75
" " Dr. T. Y. Sutphen	3.75
" " Dr. J. W. Kelly...	2.25
" " Dr. S. M. Wilson...	2.25
" " Dr. P. Frace....	1.50
" " Dr. U. Allen....	1.00
" " Dr. W. Patterson.	.75
	\$3,956.00
Balance on hand, May 1, 1924..	905.31
Transfer to Permanent Fund...	\$ 500.00

#### Bonnie Burn Sanatorium.

Dr. J. E. Runnells reports that on Dec. 31st there were 253 patients in the Sanatorium; 136 males and 117 females. This included 77 children in the Preventorium. Since the last report 24 patients have been admitted, 10 males and 13 females. Four of these admissions went to the Preventorium.

The admissions are classified as follows: Pretubercular, 4; incipient, 3; moderately advanced, 3; far advanced, 13. The largest number of patients present at any time during the month has been 256. Smallest number, 248. This number includes 71 children in the Preventorium and 90 out of the county patients.

#### New and Reinstated Members.

The Secretary reports the following list of members recently registered. New members: E. T. Carberry, of Wharton; W. A. Johnson, 80 South St., Orange; Mignet Steinberg, 351 Walnut St., Newark; Wm. Zuckerman, 66 Weequahic Avenue, Newark.

Reinstated: R. L. Banister, Newark; Ernest W. Mirean, 1272 Springfield Ave., Irvington; and Wm. A. Tansey, 524 Sanford Avenue.

The Medical Club of Philadelphia, at the annual meeting for the election of officers, Jan. 16, 1925, elected the following ticket: President: Charles W. Burr. First Vice-President: Paul J. Sarain. Second Vice-President: Alexander MacAlister. Secretary: William S. Wray. Treasurer: George A. Knowles. Governor (Term for 5 years): William E. Hughes. Additional Directors: George H. Cross, Edwin B. Miller, Edgar S. Buyers, Frederick S. Baldi and Walt P. Conaway.



## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal post-graduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

### Internal Antiseptics.

Addressing the Essex County Medical Society at its February meeting, Dr. Edward L. Keyes related, incidentally, his experience with urotropin and hexyl resorcinol (See County report in this number of the Journal). In the very first series of these "observations", published in the January issue (page 27), we mentioned the appearance of Leonard's article on the therapeutic value of hexyl resorcinol and described its reputed powerful germicidal properties in the treatment of infections of the urinary tract exclusive of the kidneys. Such strong claims were made as to its antiseptic and bacterial value, and as to its nontoxicity, that we were reminded of that wise saying generally attributed to President Lincoln—"That is important, if true". Keyes obtained some of this new drug from the Johns Hopkins laboratories and states that in his limited experience with it the claims of the author were substantiated, but he reminded us that our hopes and expectations were once very high in regard to urotropin and that somewhat similar hopes had been, and are today in some quarters, entertained with regard to mercurochrome. He thought it rather unfortunate that the New York Times had given such publicity to the article relating to Leonard's work before the drug has been thoroughly tested and proved. Just as urotropin has proved to be a very valuable internal antiseptic when properly administered to properly selected cases, so hexyl resorcinol will probably come to occupy an important place among therapeutic measures, and it is even possible that it will accomplish all that is claimed for it, but it is improbable that any drug as yet known will prove to be a perfect systemic antiseptic for universal use, such as the untrained mind might be led to expect from the newspaper story.

### Mercurochrome.

The employment of intravenous injections of mercurochrome has received considerable impetus from the reports emanating from Young's clinic at the Johns Hopkins, and a

recent communication from there describes a series of animal experiments designed to show the effect of this drug upon the kidneys. Hill and Bidgood (Bull. Johns Hopkins Hosp., 35:409, Dec., 1924) subjected rabbits to injections varying in strength from 1 to 10 mgm. per kilo of body weight and later studied the anatomic changes produced. They find that intravenous mercurochrome causes a mild reaction in the kidney directly proportional to the dose administered; that there is no destruction of tubular epithelium from doses as high as 7.5 mgm. per kilo, but that with 10 mgm. per kilo there is definite renal damage. Repeated injections did not cause additional damage to these animals, so the drug may be thus given twice a week with safety provided a dose of not more than 5 mgm. per kilo be injected. Such slight damage as was caused seemed not irreparable, for at the end of 2 months the kidneys showed no evidence of previous lesions.

In contradistinction to this laboratory report, we are beginning to hear, by case history reports in the discussions at medical society meetings, of serious renal complications resulting from the intravenous use of mercurochrome and several articles have appeared in the journals indicating that this treatment is neither as safe nor as efficacious as has been claimed by some of those most enthusiastic in its use. F. S. Hopkins (Boston M. & S. Jour., 191:732, Oct. 16, 1924) reports on the treatment of 12 patients at the Springfield (Mass.) Hospital, with results showing no benefit in 5 cases, doubtful benefit in 5 other cases, and only 2 cases in which the treatment proved to be of definite value. In a later paper in the same journal (Boston M. & S. Jour., 191:981, Nov. 20, 1924), Adams reports upon 5 cases of septicemia submitted to mercurochrome intravenous injections in dosage of 6 mgm. per kilo of body weight, with disappointing results. Wade (Northwest Med., 23:508, Nov., 1924) describes a case of infected ovarian cyst in which the cyst cavity was injected with a 5% solution of mercurochrome and the patient developed a severe stomatitis and suffered a marked aggravation of an existing acute nephritis; the stomatitis disappeared upon cessation of the treatment but the nephritis persisted. Wade concludes from his experience that "in poorly drained cavities mercurochrome must be used in very weak solutions" and that "intravenous administration calls for the greatest caution and should be restricted to the most urgent indications".

### Intravenous Medication.

In connection with this discussion of the intravenous injections of mercurochrome, it will not be out of place to call attention to a most interesting and valuable contribution by P. J. Hanzlik, Pharmacologist at Stanford University (California & West Med., 23:161, Feb., 1925) under the title "Blood and Tissue Changes in Anaphylactoid Reactions". For the present purpose, we can give only his remarks concerning intravenous medication, but his entire paper is worthy of careful perusal. "Many agents causing anaphylactoid reactions are used as nonspecific agents in the treatment of disease, especially of that with indefinite or unknown etiology, the aim being to induce such reactions for the sake of producing



beneficial therapeutic effects, if not cure. The effects appear to be brought about through widespread alterations in cellular activity. However, sometimes the reactions are alarming and even result in death. These changes would be expected from the embolism, thrombosis, agglutination and flocculation, which occur in the blood stream and in important organs. Hence such agents should be used cautiously. The same holds true with respect to the indiscriminate use of agents and drugs intravenously. Dangerous results may occur with relatively inert and inactive agents; in fact, the results cannot be predicted from the physical and chemical properties of the agents. Intravenous therapy is chiefly a fad, promoted largely by unscrupulous manufacturers, and, unfortunately, also by some physicians who fail to realize the dangers involved, and to appreciate that most drugs so advocated are promptly and readily absorbed when given by mouth, hypodermically or intramuscularly. There is no excuse for administering distilled water, urotropin, iodide and salicylate intravenously, because all of the ordinary effects are promptly and readily obtained when given by mouth. On the contrary, detrimental and undesirable effects may occur when they are administered intravenously.

There are only 2 drugs for which, at present, the intravenous route is indicated to secure their therapeutic effects, and these are arsenamin and strophanthin. But, even these agents are being replaced by combinations with other drugs and by substitutes, in order that their effects may be secured intramuscularly and subcutaneously so as to avoid detrimental effects from intravenous injection. Such dyes as rose bengal, phenoltetrachlorophthalein, and others which are being exploited as diagnostic agents and injected intravenously, are not harmless. We have had considerable experience recently with these dyes in dogs, rabbits, guinea-pigs and pigeons. They cause hemolysis, impart a brown color to the plasma and even produce systemic symptoms, not to mention the local effects in veins (phlebitis). We have had no experience with mercurochrome, but scarcely a month passes without a call from a physician drawing our attention to the marked systemic reactions from this agent, and recent reports in the literature testify adequately to the occurrence of undesirable and harmful effects when it is used intravenously."

These are the views of one working in pure science, but simultaneously comes along an interesting corroborative clinical pronouncement from Germany. It is not long since we were assured that the intravenous injection of sodium cacodylate was the proper treatment, if not indeed a panacea, for the amyostasia of locomotor ataxia. Now, Orbach (*Deutsch. med. Wochenschr.*, 50:1371, Oct. 3, 1924) tells in detail of 8 cases of paralysis agitans and postencephalitic Parkinson's disease treated thus with anything but satisfactory results. Instead of the promised increase in weight, there was emaciation, some patients became much weakened; psychic disturbances developed in 3 instances; death resulted within a short time after treatment in 3 cases and in 1 of these an autopsy proved the connection between the medication and the fatality. On the basis of experience, Orbach advises that

sodium cacodylate given intravenously in large doses may cause serious disturbances to the autonomic nervous system and to the composition of the blood.

#### Relation of Obstetrics to Preventive Medicine.

The prenatal care of the expectant mother has been much discussed in recent years and it would seem that the profession must have reached definite conclusions regarding the necessity for such care of all their obstetric cases and must be applying the lessons learned, but there have recently appeared a series of papers indicating that much remains to be done both within the ranks of the profession and with respect to public education. Bourland (*Southern Med. Jour.*, 17:869, Nov., 1924) presents a study of conditions in the city of Dallas, Texas, to illustrate the unsatisfactory state of affairs existing; and we of the northern states need not at once take umbrage to ourselves because this comes from the far south, because what he has to say of his city is equally applicable to spots much nearer our homes. As he well says, deplorable conditions exist in cities that are well provided with sufficient hospital facilities for the proper and safe care of the pregnant woman. The objectives in obstetrics are (1) to deliver a living mother of a living child, and (2) to insure as far as possible the future health of both mother and child. Such results can be hoped for only as the outcome of effective prenatal care, accurate diagnosis and proper conduct of labor, and careful and intelligent management of the puerperium. A review of the statistics of mortality and of the incidence of sepsis associated with pregnancy, in any of our cities, will show that the end-results in obstetrics are far below what they should be in consideration of the present state of our medical knowledge.

Studdiford (*Boston M. & S. J.*, 191:617, Oct. 2., 1924) writes of the same matter and asks a series of pertinent questions: Why should more than 22% of the recorded deaths from causes connected with childbirth have been due to eclampsia and renal diseases, which might have been prevented by proper care in the early stages of pregnancy? Why should an estimated 32% of maternal deaths be due to infection, while there has been a general decline in the surgical death rate where the same technic of asepsis is required? Why should more than 50% of the gynecologic conditions requiring treatment have their origin associated with pregnancy or parturition?

There is an increasing realization that skilled attention could have prevented many deaths,—neonatal, natal, infant maternal—as well as much of the chronic invalidism that has followed childbirth, and there has arisen much justifiable criticism of the teaching and practice of this branch of medicine. Studdiford reviews the development of obstetric service in our hospitals and considers the relation of this service to gynecology and to the social service staff of these institutions. In the prenatal clinic it has been found that about 17% of registered cases need treatment or supervision in the hospital or in special clinics. In these days of good roads, automobiles and well equipped hospitals, the complicated obstetric case should easily receive the same consideration as is generally accorded to an acute appendicitis or strangulated hernia, but, it is

perfectly patent that proper use is not being made of existing facilities and there is urgent need for a change in the professional attitude toward this very important question. Every pregnant woman should receive careful study throughout the period of gestation, any abnormality or complication should be promptly discovered and the treatment therefor as promptly provided for, hospitalization being ordered whenever it promises the greatest degree of safety for either mother or child.

## In Lighter Vein

### Wisdom

"Here are two paths," said Fate to the fool. "One leads to success; the other to failure. Choose."

And the fool, guessing blindly, chose wrongly.

"Two paths lie before you," said Fate to the wise man. "Make your choice."

And the man of wisdom, employing all the rules of logic, also chose the wrong path.

Charles G. Shaw.

### Bedtime Story.

Once there was a man who was an ordinary clerk at fourteen dollars a week.

"There is no reason," said his friends, why any man should be such a failure today."

So at their suggestion he went to a psycho-analyst, took a course in personality development, subscribed for the American Magazine and Success, followed Bernarr Macfadden's health rules, and ate three cakes of yeast daily.

That man is now making fourteen dollars every week. —B. B. in Life.

**Maybe.**—Distracted Wife (at bedside of sick husband)—"Is there no hope, doctor?"

Doctor—"I don't know, madame. Tell me first what you are hoping for."—Lord Jeff.

**Only Explanation.**—Host—"This is pre-war whiskey, you know."

Discriminating Guest—"Good heavens, you don't mean to say there's going to be another war?"—The Humorist (London).

**Tardy.**—Professor (to Freshman entering class late)—"When were you born?"

Freshman—"On the second of April."

Professor—"Late again."

—The DePauw Daily.

Over one hundred million people in the United States escaped being run over by automobiles last year, several of them having also escaped the year before.—Life.

**Oh, Joy!**—Father (taking small boy to dentist)—"Well, I've rung three times, and there doesn't seem to be any answer."

Small Boy (hopefully)—"I wonder if he's dead!"—Punch (London).

Young Hopeful—Dad, what is a Welsh rarebit?

Old Hopeless—It's something to be eaten; only it can't when it should, and it shouldn't when it can.

—Judge.

## County Society Reports

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The stated monthly meeting of the Atlantic County Medical Society was held at the Hotel Chalfonte, Friday evening, Feb. 13, Dr. D. Ward Scanlan, presiding. The minutes of the previous meeting were read and approved.

Reporting for the committee on Health and Sanitation, Dr. W. Blair Stewart referred to the Bill presented to the Legislature, and which has been passed by the Senate, having for its object the control of the word "doctor". He also reported that the legislature is discussing the imposing of heavier fines regarding infringements of the Narcotic Act. Dr. Stewart recommended the broadcasting of a series of health talks through the local radio station and sponsored by the Atlantic County Medical Society; that these articles be prepared by those members especially adapted to the particular topic and that these articles be submitted to a special committee for final recommendation.

Dr. Walt P. Conaway moved that Dr. Blair Stewart's report be accepted and that his suggestion be carried out.

Dr. William E. Darnall reported for the Library Committee and Dr. Conaway reported for the Board of Censors.

It was moved and properly seconded that the date of the March meeting be left to the committee on arrangements of the Scientific Program.

A letter was read by Dr. E. F. Uzzell, secretary, which communication embodied an invitation extended to the County Medical Society to attend a special symposium on "Heart Conditions" given under the auspices of the Philadelphia County Medical Society on Wednesday evening, Feb. 25.

The Scientific Program was opened by Dr. Robert H. Ivy, Professor of Oral Surgery at the University of Pennsylvania and the Post Graduate School. In introducing his subject, "Acute Swelling of the Submaxillary Region", Dr. Ivy presented a comprehensive description of the anatomy and physiology of the parts and stated that there appeared to be misapprehension about several conditions manifested by swelling in the submaxillary region. Sébilleau called attention to this confusion in an admirable paper in the Presse Médicale, March 16, 1921. He points out the common error of regarding acute inflammatory swelling in the submaxillary region following dental abscess as a lymphadenitis instead of a cellulitis by direct extension from the periosteum of the mandible. The course of an acute dental abscess beginning in the lower jaw depends entirely upon the place at which the pus perforates the bone. The abscess is at first intraalveolar, then intraosseous, then becomes superiosteal, and finally extraperiosteal, provoking around it a more or less extensive cellulitis, which resembles lymphadenitis. If the perforation takes place at the level of the alveolar process of the jaw, there is formed a swelling in the vestibule of the mouth with a buccal opening or an opening on the skin of the face; if, on the contrary, the perforation occurs at the level of the body of the bone, a true submaxillary phlegmon is formed. The location of the swelling differs somewhat according to whether the outer



plate, the inner plate, or the lower border of the mandible is perforated. That this process is one of osteoperiostitis and not lymphadenitis is shown by several facts: (1) The submaxillary swelling communicates with the alveolus. This can be demonstrated by pressure over the swelling causing pus to be discharged from the socket of the tooth. (2) If the submaxillary swelling is incised through the skin, a more or less extensive surface of denuded bone can always be felt with a probe. (3) All cases, and more especially those involving the posterior part of the mandible, are accompanied by trismus or limited openings of the jaws; due to a fusion of the jaw bone with the inflammatory mass, and the most important sign in diagnosis of osteoperiostitis.

Except for a few cases of diffuse osteomyelitis in children (and even this is open to discussion), mandibular osteomyelitis should practically always be regarded as of dental origin, either the consequence of dental caries, pericementitis, maleruption of the third molar, or retained teeth.

In every case manifesting an inflammatory swelling of the submaxillary region, accompanied by trismus, dental pathology should be suspected. Lymphadenitis in the submaxillary region is nearly always due to ulcerations of the oral soft tissues, the gums, vestibule and floor of the mouth and tongue. In tonsilitis and inflammations about the fauces, the lymph node beneath the angle of the jaw is involved. The lymphatic swellings are almost never accompanied by trismus. They are generally more circumscribed in the beginning than the osteoperiostitis cases. The submaxillary phlegmon complicating osteoperiostitis of dental origin usually requires drainage by incision beneath the lower border of the jaw, and by planning this incision according to the point at which the pus approaches the skin, either in front of or behind the facial artery, annoying hemorrhage from cutting this artery will be avoided. The tooth or teeth from which the trouble originates should be removed at the time the external incision is made, or soon afterward, otherwise a sinus may persist or the condition will recur, or the trismus may develop into ankylosis. Even though a considerable portion of the surface of the mandible be denuded of periosteum, prompt incision and drainage with removal of the cause may result in healing without necrosis.

A not uncommon condition is that of an acute or subacute swelling in the submaxillary region, fairly well circumscribed and quite tender to pressure, with no limitation in opening the mouth. This condition also is usually diagnosed as an inflammatory enlargement of the submaxillary lymph nodes, and attributed to drainage from infected teeth or tonsils.

In the absence of an inflamed tonsil or acute stomatitis, what other conditions may cause the symptoms mentioned, viz., acute or subacute circumscribed tender swelling in the submaxillary region? We must not overlook the presence in this region of the submaxillary salivary gland and the possibility of its enlargement from obstruction of Wharton's duct by a salivary calculus or by inflammation without calculus. It is this condition that is most commonly mistaken for a lymphadenitis due to infection from teeth or tonsils. An extremely tender nodule (the calculus) may be

felt somewhere along the course of the duct in the floor of the mouth by combined ultra-oral palpation. Occasionally these symptoms and signs will exist from acute inflammatory obstruction of the duct without calculus. The likelihood of a stone should however always be thought of under these circumstances and careful palpation of the floor of the mouth will frequently reveal a point of tenderness or a hard nodule. The diagnosis will be confirmed by x-ray examination. The treatment of obstructive enlargement of the submaxillary gland by calculus in Wharton's duct is primarily removal of the calculus.

With the aid of lantern slides, Dr. Ivy presented several cases to illustrate points referred to above.

The Scientific Program was continued by Dr. Louis C. Schroeder, Assistant Professor of Pediatrics at Cornell University, presenting as his topic "Certain Aspects of Infant Feeding". Dr. Schroeder reviewed in brief the caloric and percentage methods, the application of protein milk, butter-flour mixtures, lactic acid milk, Dubo (whole milk with addition of 17% sugar, used by Schick, thick cereal mixtures, and dry whole milks. He stipulated that of all the concentrated foods at present used, the one which seems to meet with greatest favor is Lactic Acid Milk with the addition of Corn Syrup. "To Marriott must go the credit of blazing the way for a renewed interest in the study of malnutrition and the use of this particular food. At the Nursery and Child's Hospital, we use considerable quantities of Lactic Acid Milk. It is seldom diluted more than one-third and our experience with it has been most satisfactory. Why infants can digest it, even when fed undiluted, is still a moot question. Among the advantages claimed for Lactic Acid Milk are the fact that it has a favorable reaction on the bacterial flora of the intestinal tract, that it causes a fine flocculent curd, that it denaturizes the protein, and that it stimulates the flow of the bile and intestinal secretions and likewise stimulates the musculature of the gastro-intestinal tract, but it is not all unlikely that the fine curd formation and a possible helpful bacterial action in the intestinal tract are alone chiefly responsible."

In discussing the sugars, Dr. Schroeder held that there existed very marked differences of opinion as to the advantages of one sugar over another in cases where digestion is impaired, but it is quite generally conceded that for the average baby with normal digestive powers it apparently makes little or no difference which one is used. When we encounter digestive upsets, however, we must understand that in all probability both cane and milk sugar ferment more rapidly and are more likely to cause indigestion than are the dextrinized malt sugars. Let us consider for a moment how the disaccharides are converted to the monosaccharides. Lactose, or milk sugar splits up into dextrose and galactose, sucrose into dextrose, and levulose derived from cane sugar is more readily fermented and galactose from lactose is less easily absorbed; so, theoretically, it would appear that a dextrinized malt sugar should be used in difficult feeding cases. Starches as you will recall go first to the dextrin stage, then to the maltose and finally to the dextroses. As the dextrins are not easily fermented, there can be no possible objection to the use of starch at a very early



age. The use of a starch-like farina combined with dextrimaltose, as suggested in the thick cereal mixtures, is undoubtedly wise in difficult feeding cases. In malnutrition one can expect the largest percentage of good results from either that type of feeding, or from the use of very slightly diluted whole lactic acid milk combined with corn syrup such as Karo.

Thick cereal mixtures came into vogue with the appreciation of the fact that in pyloric stenosis not only were the chances of vomiting diminished because a semisolid rather than a liquid food was in the stomach, but on a physiologic basis that the musculature of the stomach functioned more efficiently when it had something solid to work on. Vomiting in breast-fed babies may be considerably diminished if not altogether abolished, by giving one or two teaspoons of cereal before each nursing. Thus, one of the chief indications for the use of thick cereal mixtures is vomiting. It is extremely useful, in the so-called hypertonic baby—the ever restless youngster who never seems to put on weight because of his ceaseless activity.

Boiling milk makes it more easily digestible. Numberless objections to the use of cooked milk have been raised, but only one of these needs concern us. Does boiled milk cause scurvy? Undoubted evidence has been brought forward that heated milk may produce scurvy, but cases are on record where scurvy has been cured by feeding with milk boiled for 5 minutes and without the use of orange juice. The problem is not entirely one of heated milk. In France, practically all milk is sterilized and the comparative freedom of the French children from scurvy has long been known. French pediatricians attribute the absence of scurvy to the fact that the milk is almost immediately boiled and then kept tightly stoppered. We are apt to forget that old milk or milk exposed to the air or milk that has been alkalized is more apt to lose a larger proportion of its antiscorbutic properties than occurs from the mere heating, unless the heating process is continued over too long a period of time.

Dr. Schroeder urged the early use of orange juice for its antiscorbutic properties, mentioning, as a substitute, grape juice or tomato juice. He also advocated a relatively early use of cod liver oil for its antirhacitic elements.

The present tendencies in infant feedings may be summarized as follows:

1. The use of concentrated foods such as whole milk with 17% sugar added, or whole lactic acid milk with corn syrup.
2. To pay more attention to the proportions between the 3 chief food elements rather than on a single one.
3. The use of cod liver oil in prematures from the very start, and from the second month during the winter for all babies.
4. A fuller realization that many difficult feeding problems arise from conditions outside the gastro-intestinal tract, such as cerebral injuries and infections.

A general discussion followed the presentation of these two topics, after which the meeting adjourned.

#### Report of the Annual Meeting of the Atlantic City Hospital Staff.

D. W. Scanlan, M.D., Reporter.

The annual meeting of the staff of the

Atlantic City Hospital was held at the Hotel Breakers on the evening of Jan. 16. The meeting was called to order by the President, Dr. Otis D. Stickney.

Dr. Hobart Amory Hare, of Philadelphia, attended the meeting as a guest of Dr. W. J. Carrington.

Dr. Theodore Senseman and Dr. Richard Bew reported on the activities involved in the construction of the hospital addition. A committee was appointed consisting of Drs. Silvers, Westcott and Marvel, Jr., to study application of proper safety devices to be incorporated in the building program. After the reports of the various committees the following officers and committees were unanimously elected to serve for the ensuing year: President: W. C. Westcott. Vice-President: Richard Bew. Secretary-Treasurer: J. H. Marcus. Chairman Program Committee: D. W. Scanlan.

Dr. Stickney transferred his duties to Dr. Westcott who now, as President, appointed the following committees:

Nurses Committee: T. Senseman, Chairman, W. E. Darnall, H. I. Silvers and R. Bew.

Interne Committee: W. J. Carrington, Chairman, H. S. Davidson and D. B. Allman.

Scientific Program.—The first half of the Scientific Program was devoted to a report on "The Practical Clinical Application of Laboratory Reports", by Dr. G. M. Gehringer.

Among the procedures outlined and emphasized were the following: Urea and sugar determinations of the blood. As these two ingredients deteriorate rapidly, the collected specimen should be sent to the hospital as soon as possible. The blood sugar determination of insulin and as a check on its efficacy; it is also useful in differentiating diabetes mellitus from other forms of glycosuria. Extreme importance is attached to the urea nitrogen determination, especially in kidney dysfunction. As a routine examination of the blood in suspected cases of nephritis the following determinations were suggested: Urea, nitrogen, uric acid, creatinin, plasma, carbon dioxid, and the chlorides whenever there is any evidence of edema.

Chemical examination will often give evidence of involvement not revealed by the functional test. In parenchymatous nephritis there is little or no nitrogen retention. Unsuspected cases of nephritis showing only gastric symptoms clinically, have been detected by blood chemistry. Relative to urinalysis, Dr. Gehringer urged the collection of a 24-hour specimen, as no quantitative test could be of value otherwise.

A resumé was given, including significant data referring to the various normal and abnormal constituents of urine. On the question of renal albuminuria, he quoted Simon as expressing the general opinion that a transitory, intermittent, and cyclic albuminuria is not infrequently observed in apparently healthy individuals, but that the facts so far brought forward do not warrant the assumption that such forms of albuminuria are physiologic. The occurrence of such albuminuria unquestionable demonstrates a certain insufficiency of the renal epithelium. The most satisfactory and accurate tests for the detection of albumin in the urine, qualitatively, is the heat and acetic acid test. As to the appearance of sugar in the urine, Dr. Gehringer mentioned that very often traces of glucose and other

sugars are found at times in the healthy but the quantity is too minute to respond to ordinary tests. There are 2 distinct types of pathologic glycosuria; i. e., transitory glycosuria and persistent glycosuria. The transitory type may follow the ingestion of sugar in excess, causing the assimilation limit to be exceeded, or it may accompany any one of several disorders which cause impairment of the power of assimilating sugar; this may occur after general anesthesia, administration of certain drugs, in some cases of hyperthyroidism, in pregnancy, and following shock and head injuries. It is mentioned that glycosuria may follow strong emotions, (anger, fear, anxiety), through the increased adrenal secretion leading to sudden mobilization of dextrose which had been stored as glycogen. Various tests for glucose in the urine are available, but Gehringer favors Benedict's qualitative and quantitative methods as they are less liable to give false positives.

Acetone bodies in the urine comprise acetone, diacetic acid and betahydroxybutyric acid. Minute traces of acetone may be present under normal conditions. Amounts of varying degrees are not uncommon when the intake of carbohydrates is limited; in fevers; gastro-intestinal disturbances; certain nervous disorders; cachectic conditions; in pernicious anemia; vomiting of pregnancy; in eclampsia; and following anesthesia, particularly chloroform. Diacetic acid occurs in the same conditions as acetone, but has more serious significance. Beta-oxybutyric acid is rarely tested for. The diazo reaction is at best an empiric test and must be interpreted in the light of clinical symptoms; its usefulness is practically limited to typhoid fever, tuberculosis and measles. In the latter, it may aid in differentiating measles from German measles in which it does not occur. In discussing the phenolsulphonephthalein test for kidney efficiency, Gehringer stated that the amount of the drug eliminated normally is 40 to 60% during the first hour, 20 to 25% the second hour, or a total of 60 to 85% in the 2 hours. The amount of the drug has been found to be independent of the quantity of urine obtained. The more accurate method is found in the Mosenthal test, which is a more refined method of examination. The method of collecting the urine comprises 6 two-hour periods and 1 twelve-hour night period. Each specimen is analyzed for volume, specific gravity, total nitrogen and chlorides. This test is of particular value in giving earlier indication of the diminished kidney deficiency. In speaking of the microscopic examination of the sediment, he divides the constituents into two classes, organized and unorganized. The important element is the organized constituents, which are tube casts, epithelial cells, pus corpuscles, spermatozoa, bacteria, and animal parasites.

The discussion of Dr. Gehringer's paper was opened by Dr. Hare, who evinced an especial interest in the Mosenthal test. He considered it most valuable of all functional kidney tests. In speaking of the phenolsulphonephthalein test, he considered it important to note whether the kidney can eliminate the dye properly, as this will give some idea of the ability of a limited function. The diuretics of choice are potassium citrate and potassium acetate, stating however, that these were not true diuretics; and indirectly influenced the fever. They

increased the elimination of the solids by increasing the water output.

Dr. Hare cautioned the members to keep in mind that edema is a physiologic function and that the water so retained has for its object the dilution of the salts, 0.9% being normal. In conclusion, Dr. Hare stated that there is present an impairment of renal function.

Dr. E. H. Harvey urged freer use of the Mosenthal test; submitting for examination a 24-hour specimen of the urine for examination instead of a single specimen; and the broader use of blood cultures, they being far superior and more accurate, especially in the diagnosing of typhoid.

Dr. Richard Bew urged a broader and greater coöperation between the laboratory and clinician, feeling that a better understanding could be promoted by freer interchange of thoughts and procedures. He also advocated a more strict adherence to the proper method of collecting specimens for the laboratory examination. Of great value to the technician would be the submission of a very brief history accompanying each specimen.

The latter half of the Scientific Program was presented by Dr. Walt P. Conaway, in which he submitted a report of the operative work performed during his gynecologic service from Aug. 1, to Dec. 1. During this interval there were 65 admissions; 39 were white and 26 colored. Of the 65 patients, 62 were treated surgically, whereas the remaining 3 refused surgical aid.

A case deserving especial comment was that of a young colored girl, 19 years of age, admitted Aug. 22, with a diagnosis of pelvic inflammation, chronic appendix and a stone in the bladder. Positive cystoscopic results were obtained by Drs. Shivers and Bossert. There was also a history of a neisserian infection. On Aug. 27, an operation was performed, which included removal of the left tube and ovary and the appendix. An incision was made in the bladder and a hard, smooth stone slightly larger than an English walnut was removed. She was discharged from the hospital 12 days after operation and when seen 3 weeks later was feeling well and free from all symptoms.

Another unusual case was that of an infant born after normal delivery and admitted to the hospital 4 days later with a history of having no bowel movements or meconium since birth. Abdomen was very much distended but there was no vomiting. Various procedures made to secure bowel movements were instituted but resulted in failure. X-ray examination disclosed nothing of importance. A laparotomy was suggested but Dr. Conaway felt this would mean death to the infant. When the baby was 10 days old fecal vomiting appeared. Dr. Conaway felt that the obstruction was about 2½ inches from the anal orifice, so finally, as a last resort, inserted an old Kelly cystoscope. After some difficulty, he extended the cystoscope about 6 inches into the rectum, and bowel movement promptly commenced, followed by a rectal discharge containing blood, mucus and fecal matter which continued almost incessantly for the next 12 hours. The baby when seen a week later was in fine condition and thriving.

In closing, Dr. Conaway expressed grateful appreciation of the willing coöperation extended by members of the attending medical and surgical staff, as well as the resident staff.



### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Bergen County Medical Society was held at the Hackensack Hospital, Tuesday, Feb. 10, at 8:30 p. m., Dr. Trossbach presiding.

The speaker of the evening was Dr. Thomas F. Reilly, formerly Professor of Medicine at Fordham University, who spoke on "Prognosis of Pneumonia". Dr. Reilly began by explaining the difference between lobar pneumonia and bronchopneumonia, whether catarrhal or influenzal, and between the pneumonias of children which are usually bronchopneumonia anatomically, but which may be clinically of the lobar type with a crisis in a few days. He also referred to the exploded theory of the existence of a central pneumonia, explaining that pneumonia always begins at the periphery, though definite signs, such as bronchial breathing, may be absent until the area around a bronchus is invaded.

Considering prognosis, Dr. Reilly gave the following list of symptoms justifying an unfavorable prognosis:

1. Symptoms had from the beginning: (1) Pulse over 140 at outset, excepting children. (2) Patient over 60 with double lobar pneumonia. (3) Low leukocytosis in lobar pneumonia with acute symptoms. (4) Patient who contracts pneumonia directly from another patient. (5) Patient with advanced arteriosclerosis, with or without hypertension. (6) Adult cardiacs who have decompensated before contracting the pneumonia. (7) Patient with nephritis. (8) Patient with emphysema or asthma, who contracts lobar pneumonia. (9) Patient with Graves' disease. (10) Diabetics.

II. Bad early symptoms: (1) Severe pains, for first 24 hours. (2) Steadily rising pulse, especially when without coincident rise of temperature. (3) Low white blood count.

III. Bad symptoms from the fourth to the eighth day: (1) Persistent abdominal distension (50% mortality). (2) Rising pulse. (3) Diminution of urine. (4) Heavy albumin. (5) Delirium, in adults. (6) Frank fluid, early. (7) Persistent hiccough.

IV. Bad symptoms in the last days: (1) Deep cyanosis. (2) Pulmonary edema. (3) See-saw respiration between chest and abdomen. (4) Gasping respiration with voluntary effort. (5) Variable and intermittent pulse. (6) Extreme restlessness. (7) Lack of desire to get well. (8) Fetid diarrhea. (9) First and second heart sounds identical. (10) Hippocratic facies.

V. Symptoms justifying a good prognosis: (1) Good second sound at the apex. (2) Normal amount of urine with only a trace of albumin. (3) Tuberculosis in the early stage. (4) Marked herpes.

In regard to treatment, Dr. Reilly said that our hope lies mainly in some form of serum therapy. He believes that the stock polyvalent serum may be of service when there is not time to type the patient's organism. With Felton's concentrated serum he has had violent reactions but some excellent results when giving it intravenously in bad cases. It is his custom to digitalize early in order to secure the effect before temperature interferes. In the treatment of symptoms, Dr. Reilly objects to morphin or codein for the relief of pain or

cough, preferring aspirin and poultices or strapping. For abdominal distention, he uses the rectal tube, enemas, turpentine stupes, pituitrin, and occasionally, but with great caution, eserin. He does not think camphor in oil is of any value, and in collapse prefers to use adrenalin.

In the discussion of this subject, Dr. Bell stated that pneumonia is treated best when treated least, and that this dictum applies especially to children. Putting such patients out of doors gives a drop of 1 or 2° in temperature and reduces cyanosis. "Alcohol is the only thing which did my patients any good and it is useful at every stage of the disease and for every age of the patient. I do not digitalize early, because of the bad effect on the stomach, and if I need to do so can obtain the results in a few hours by intravenous treatment." He added that codein had given no bad results in his experience and that strapping the left chest had sometimes caused cardiac embarrassment. He had found, also, that the reaction to serums had sometimes overtaxed the kidneys.

Dr. Littwin said that in his experience a pulse rate higher than the systolic blood pressure was of bad prognostic significance and that he considered the prognosis generally bad in stout patients.

Dr. Gilady asked whether all pneumococcic septicemias are self limited and what is the relation of pneumonia to septic endocarditis? He believed that the x-rays may fail to show fluid in some cases where it can be demonstrated by needle puncture. He also considered it an observation of importance that a child doxy in the afternoon with fever and a 1 to 2 respiratory ratio invariably has pneumonia.

Dr. Trossbach recalled that Solis Cohen recommended quinin hydrobromate for the toxemia of pneumonia and regarded it as an anti-pneumococcic.

Dr. Morrow said that he had always relied upon serum for bronchopneumonias complicating the exanthems of children and the results had been very gratifying; 10 to 20 c.c. of polyvalent serum will prevent many deglutition pneumonias after intubation. He asked whether there might be any connection between the degree of protein shock that a patient exhibits and the prognosis?

In closing, Dr. Reilly said that x-ray pictures of these cases should be taken with the patient erect; otherwise an empyema may be overlooked. Shock reaction is largely responsible for the success of serums, but the question of possibly inducing a nephritis is a serious matter. The blood pressure and pulse ratio rule is too much man-made to be absolutely reliable and it is of value only in mid-life. "I always use whiskey with patients who have been accustomed to it, but not in childhood. It does strengthen the vasomotor system and favorably affects the patient's attitude."

### CAMDEN COUNTY.

Horace L. Rose, M.D., Reporter.

The regular meeting of the Camden County Medical Society was held Tuesday, Feb. 10, at 3 p. m., at the City Dispensary Building.

The program consisted of the following papers: "The Technic of Contraception", by



James T. Cooper, M.D., of Union Medical College, Foochow, China, Clinical Instructor in Obstetrics, Boston University Medical School; and, "The Annual Survey of the Cancer Problem", by Drs. A. Haines Lippincott and William F. Shoffer.

New Members elected were: Drs. Helen F. Schrack, H. L. Riddle, S. G. Carpenning, Charles H. Jackson, Vincent Del Ducca and Robert S. Gamon.

#### Camden City Medical Society.

Henry B. Decker, Secretary.

The regular monthly meeting of the Camden City Medical Society was held on Feb. 3. The society entertained the Southern Dental Society.

The meeting was without any formal papers. The dentists asked a series of questions and the members of the society retaliated, the questions of each group being mostly concerned with focal infection. Questions were answered very completely by the various members assigned to the task; the time limit for each answer was 5 minutes.

While much benefit was derived from this informal discussion by the members of both societies, the object of the meeting was chiefly to promote a better understanding between the members of the two professions and to establish a more complete coöperation in those cases requiring both medical and dental care. Now that the joint meeting has taken place it is probable that a similar meeting will be held yearly in which some medico-dental problem may be considered in a more formal manner.

Drs. R. T. Fox, of Gloucester, and Gerhard Loeling, of Merchantville, were elected to membership.

At the March meeting the urologists will take up the diagnosis and treatment of venereal diseases.

#### Camden City Medical Society.

Henry B. Decker, Secretary.

At a special meeting of the Camden City Medical Society, held Feb. 19, 1925, the following resolution was unanimously adopted:

Whereas, We pause in awed submission to the Divine Will in removing from our midst our co-laborer, Dr. Edward C. Pechin, and

Whereas, In his medical career, he has always been held in the highest esteem, both by his brother practitioners and the community at large, always willing and ready to answer the call of the sick; his understanding of the obligations of the physician being the principal factor of his early death.

Be it resolved, That this society mourns with his family in their great loss.

A. Haines Lippincott,

F. Wm. Shafer,

Alfred M. Elwell, Com.

#### ESSEX COUNTY.

Alfred Stahl, M.D., F.A.C.S., Reporter.

The regular monthly meeting of the Essex County Medical Society, was held at the Academy of Medicine of Northern New Jersey in Newark, Feb. 19, with an attendance of about 150 members.

The legislative situation was fully explained

by Dr. Henry O. Reik, the Editor of the State Journal. He stated that the Senate Bill 132 on the Title Doctor had passed the Senate without a dissenting vote, and was now before the Assembly.

Dr. E. L. Keyes, Professor of Urology, at Cornell Medical College, delivered an address on "Some Urologic Observations". Referring to urinary antiseptics, Dr. Keyes stated that as urotropin depended entirely for its urinary antiseptic action upon the liberation of formalin, and as this liberation can only take place in acid solution, it is useless to give it when the urine is alkaline and ammoniacal, no matter how much acid sodium phosphate is given. Urotropin is most efficacious where there is retention of urine of an acid reaction. Infections of the bladder in pregnancy almost invariably do well on urotropin. Hexyl resorcinol, the new urinary antiseptic recently brought out at Johns Hopkins, differs from urotropin in that it is not dependent upon a chemical splitting up for its antiseptic action, but is in itself a powerful urinary antiseptic.

Dr. C. Rutherford O'Crowley, President of the Essex County Society, gave a dinner in honor of Dr. Keyes, before the meeting, at the Newark Athletic Club. About 25 guests were present.

In the death of Dr. George R. Kent, which occurred on the fifteenth of this month, this society has lost one of its finest members. Perhaps no better tribute can be paid to his memory than that rendered by the Newark Evening News, which we copy below:

#### An Old-Fashioned Family Doctor.

"As the years pass figures that in youth were part of the genre of life fade from view and others do not take their place. Of such was the family doctor, the general practitioner, father confessor of families, venerated friend.

There died only the other day one of those patriarchs of healing who filled all the requirements of his noble profession. Dr. George R. Kent was during his long life just such a figure whom a day of specialists is fast erasing. How many men and women he assisted into the world perhaps no one but he knew. His old-fashioned buggy with its sensible horse was drawn up before countless Newark homes in his sixty years of practice, and the hope and comfort he brought in times of fear will not be forgotten. The old doctor may not have been as devoted to the latest wrinkle in medicine as some spruce youngsters in their forties, but he had what they could not, and that was a vast experience. He was the type which makes all seem better when "The doctor has come"! flashes through the house. One hears of "the bedside manner," spoken with an air of patronage. Yet there is a bedside manner that is no simulation of interest, but a genuine feeling of regard for the patient. It is one of the things that differentiates the family doctor from the medical practitioner. There are pastors who have it, too.

Dr. Kent on his rounds behind his old-fashioned horse; Dr. Kent in his old-fashioned flower garden; Dr. Kent "visiting" in the old-fashioned, leisurely way—Newark will know him no more. And be the poorer for the loss."

**GLOUCESTER COUNTY.**

Henry B. Diverty, M.D., Reporter.

The regular monthly meeting of the Gloucester County Medical Society was held in the Social Room of the First National Bank of Woodbury, Feb. 19, at 9 p. m. The following members and guests were in attendance: Drs. Ashcraft, of Mullica Hill; Hollinshead and Hunter, of Westville; Buzby, of Swedesboro; Wood and Sinxon, of Paulsboro; Ulmer, of Gibbstown; Burkett, Knight, Slaughter and Lummis, of Pitman; Roy Carpenter, Wm. Brewer, David Brewer, Underwood, Campbell, Sickel, W. H. Carpenter and Diverty, of Woodbury; Stout, of Wenonah.

Delegates from Camden County, Drs. Emma Richardson, of Camden, and Dr. LeFevre, of Blackwood. Guests: Dr. Paul M. Champin, of Woodbury; Dr. W. F. Shafer, of Camden, and Dr. B. F. Buzby, of Camden.

The following resolution on the death of Dr. Ruth Clement, of National Park, was adopted:

"Resolved. We learn with a profound sense of sorrow of the death of our late colleague, Dr. Ruth Clement, of National Park. Therefore, be it resolved, That we extend to her bereaved family our deepest sympathy in their sorrow.

"Further, That we share with the community the realization that in the death of Dr. Ruth Clement we have lost an upright and patriotic citizen and a faithful and loyal member of the medical profession.

"Further, That a copy of these resolutions be sent to the family and spread upon the minutes."

Dr. Duncan Campbell,

Dr. Henry B. Diverty, Com.

Dated Feb. 19, 1925.

The essayist of the evening was Prof. J. T. Rugh, of Jefferson Hospital, Philadelphia. His subject "Fractures", which was listened to with great interest. Discussion was made by Dr. Buzby, of Camden, and Dr. Shafer, of Camden.

After the literary program Caterer Robinson served refreshments.

An invitation from Dr. Hollowell, of Atlantic City, to meet at her school in lower Atlantic, was accepted with thanks.

**HUDSON COUNTY.**

Wm. Freile, M.D., F.A.C.S., Reporter.

The stated monthly meeting of the Hudson County Medical Society was held Tuesday, Feb. 3, 1925, at the City Hospital, Jersey City. President Luippold in the chair.

The applications of Drs. L. M. Perkel and Benjamin J. Feinberg, of Jersey City, and Dr. Monahan of the Hudson County Institution were acted upon favorably.

It was announced that caduceus emblems bearing the Hudson County Medical Society Seal were available, and would cost \$1.25 each.

Dr. Jos. Londrigan, for the Dinner Committee, urged a large attendance at the annual dinner at Braunstein's on the 7th inst., and bespoke a prompt assemblage at 8:30 p. m., so that the dinner and speaking could be under way, as per schedule.

The President stated that Dr. Haskings had gone to great pains in his revision of the constitution and by-laws, and that it required two

readings of the proposed changes, and inasmuch as the essayist of the evening had not yet arrived, the first reading would take place, and he invited criticism or suggestions. The proposed new constitution, will be published in "The Bulletin" so that there will be time to look the matter over and digest it.

Dr. A. P. Haskings stated that there really was no copy of the original laws available. What we have is essentially what has come down to us from the period of which we have recorded minutes, viz., 1881. In 1907, 1911 and 1914, he was on a committee to revise, but the instructions were to add to rather than make any radical changes. Now that the society is large and getting larger, with a larger amount of business to transact, it was felt that some more expeditious method should be devised, and thereby allow more time for the scientific aspects: the first reading then proceeded.

The President said it gave him pleasure to present one well known to most of the members, and one whose large experience with the subject would make his presentation interesting and instructive, Dr. John J. Moorhead of New York, to speak on "The Doctor and the Fracture Situation". We have in preparation a synopsis of this very practical and helpful lecture, and will publish it at the earliest opportunity.

**MERCER COUNTY.**

A. Dunbar Hutchinson, M.D., Reporter.

The society met in the Princeton Room of the Stacy-Trent Hotel, Feb. 11, at 8:30 p. m.

Following the reading of the minutes, the president, Dr. Hagerty, introduced the speaker of the evening, Dr. Philip C. Douress, police surgeon of Trenton, who gave a very interesting and instructive address on the subject "The Schaeffer Method". Dr. Douress in his review of the History of Resuscitation, referred to the early era of attempts to bring about breathing, following its cessation caused by drowning.

In 1767, an association was formed to study the question, then followed Marshall Hall in 1857, Sylvester in 1863, Schafer in 1902,—until 1922 when the American Gas Association asked for an investigation of gas poisoning, and a Commission on Carbon Monoxide Poisoning, consisting of leading men of the world was formed, which commission made extensive research and developed data of far-reaching importance.

The physiology of respiration, with a detailed description of the four common conditions,—gas poisoning, drowning, electric shock and anesthesia collapse, was then dwelt upon. The speaker described the many styles of mechanical apparatus that soon followed and overstocked the market with worthless machines, producing a neglect of the manual method during this period.

With more or less reaction following, the study of the manual method was more enthusiastically entered into, with the result that the Schaeffer method is now employed universally, and is taught most thoroughly in the Police and Fire Departments of the City of Trenton.

Drs. John B. Sill, of Trenton, and Raycroft, Professor of Hygiene of Princeton University,



opened the very interesting discussion of the subject. Dr. Douress presented several members of the Police and Fire Departments of the city, who kindly consented, under the direction of Sergeant of Police Dooling and Chief Mechanic Eaton, with Lieutenant Terry of the Fire Department, to demonstrate the apparatus, and to show the application of the Schaeffer method.

Drs. John H. Fretz, Leonard L. Friedmann, G. M. Frank and R. F. Cottone were elected to membership.

A letter from Dr. D. W. Scanlan, president of the Atlantic County Society, including the program for their next meeting, to be held Feb. 13, at the Chalfonte, was read, and due notice taken thereof.

The members then enjoyed a social hour during a luncheon, in which the members of the City Departments were invited to join.

The next meeting of the society will be held in the Carteret Club, on the evening of Mar. 11, due notice of which will be sent to every member.

#### PASSAIC COUNTY.

Louis G. Shapiro, M.D., Reporter.

The regular monthly meeting of the Passaic County Medical Society was held on Thursday evening, Feb. 12, in the Chamber of Commerce Rooms, Paterson, 34 members and 2 visitors were present. Dr. Thomas A. Dingman presided.

Dr. W. E. Caldwell, of New York City, addressed the society upon "Pathologic Findings in Still-births and Neonatal Deaths, and Suggestions for Improving These Conditions." The basis of his talk was data derived from over 600 autopsies performed at the Sloane Maternity Hospital, which showed conclusively that a large percentage of these deaths were due to birth injury. As a matter of fact, the assertion was made that congenital atelectasis, as a cause for death, did not exist and that a large number of these cases, so-called, were due to birth injuries. Lantern slide pictures of the findings in these autopsies clarified the presentation considerably.

The first slides shown, were those of fractures of the cervical spinal column. The sixth or seventh cervical vertebra being the one usually broken. These fractures were produced in breech extraction by throwing the baby's body upward and forward upon the mother and producing an angulation of the spine over the sharp symphysis pubis as the fulcrum. Another group of slides illustrated the findings in cases with a torn tentorium cerebelli with consequent hemorrhage. This is produced in breech extraction by traction on the after-coming head when it is in the extended position. The injury can, likewise be produced by forceps extraction of a poorly flexed head in a vertex presentation, or even in spontaneous birth of a vertex presentation with the head poorly flexed. A single illustration of a large subcapsular liver hemorrhage was attributed to torsion of the body in breech extraction. Reproductions of plates from various obstetric textbooks were shown, illustrating the procedures advocated formerly, for breech extractions. These were discussed and criticised in view of the newer information derived from autopsy findings in series

of still-births at Sloane Maternity Hospital and elsewhere by Holland and Caruthers and others; all of which showed a high incidence of birth injuries. Moreover, the work of Dr. Potter of Buffalo has revolutionized accepted views regarding breech extractions.

The newer concepts applying to the management of breech cases were presented as follows:—

The old idea that only 5 minutes time is permissible for extraction of the after-coming head is wrong; that as much time as necessary may be taken even as much as 45 minutes. Forcible traction is always to be avoided. When a breech is impacted and progress is slow, the impaction should be broken up. Impaction leads to extension of the spine and head, with obliteration of the natural curve of the infant's body, and by transmitting tension to the head may cause a tear of the tentorium cerebelli. The impaction is best broken up by anesthesia and gentle upward pressure upon the frank breech, then abduction of one thigh. This will cause flexion of the knee, allowing the foot to come within reach. The other extended leg should be similarly brought down. Both feet should be brought down in a version because firm traction on one may cause injury to the lower end of the spinal cord or cause equina. With the hand in the uterus, the head is best pushed out of the way, the arms folded in front of the baby and cord made free and lax before beginning extraction. Plenty of time should be taken. The legs, hips and body should be delivered gently without undue traction and without torsion of the body. If the arms do not follow down and nuchal hitch forms, the body should not be twisted nor should the hand of the operator be crowded past the infant's body until the latter has first been pushed upward again, dislodging the parts at the pelvic brim. With delivery of the arms and shoulders, the infant's body should rest on the operator's forearm and should never be thrown upward; in order to avoid production of a spinal fracture. Gentle pressure over the hypogastrium should maintain the head in flexion, and feed the head down so that the operator's fingers in the vagina enter the infant's mouth, when the head is gently extracted. Forceful traction on the neck, with one hand over the back of the infant and the other in the mouth, should never be attempted, because of the great liability of tearing the tentorium. When the head is felt to wedge in the brim, it should be freed by upward pressure on the infant and when dislodged, the attempt to bring the head down with biparietal diameter to one side of the promontory should be made.

Dr. Caldwell illustrated these manouvers with an infant's cadaver and a replica of a pelvis.

The matter of forceps was then discussed. The point was made that a cephalic application is the only one possible that will permit traction without undue pressure on the head. Here the points of the forceps catch on the malar bones and exert their traction there, without increasing the intracranial pressure. One is sure such an application has been made when the shank of the forceps is perpendicular to the posterior fontanel. For the practitioner who applies forceps infrequently, the



fenestrated-blade forceps is the safest. Of this group, the Simpson forceps is the best. Its only disadvantage is the wideness of the shank which exposes the perineum to great tension. The solid blade forceps is very dangerous in the hands of an inexperienced user; they slide, if the head is too large or too small, and at times slide even with a good application. With poor application, they exert a nut-cracker action on the infant's head, and are very dangerous. They should never be used on a difficult case.

Dr. Caldwell's presentation was received enthusiastically, and many questions were asked and answered.

Dr. Wassing commented on a French report wherein acute otitis media was found post-mortem as the cause of death in the new-born in a fairly large number of cases. The authors attributed the inception of the otitis to the aspiration of amniotic fluid through eustachian tubes that are more patent at this time of life than later. Dr. Caldwell stated that at Sloane, acute otitis was known to occur fairly frequently in the new-born; that they were constantly on the lookout for it; but the otitis was attributed to infections from the mothers or attendants having acute respiratory involvement.

Dr. James M. Stewart, on behalf of the Committee appointed therefore, presented a brief summary of the life and work of the late Philander Abbey Harris and resolutions as follows:—

#### Philander Abbey Harris.

Born at Quaker Settlement, near Johnsonsburch, Warren County, New Jersey, Jan. 29, 1852. His parents were Cummins O. Harris and Abigail Roberts Wintermute. He was educated at the district school of Quaker Settlement, and at Schooleys' Mountain Seminary, N. J. In 1872 he was graduated from the Medical Department of the University of Michigan with the degree of M. D., and in 1873 was graduated from the College of Physicians and Surgeons (Columbia University), New York, with an Ad eundem Degree. He began practice at Mine Hill near Dover, N. J., in 1873, locating there with a view to obtaining surgical experience among the miners who worked in the then active iron mines of that region. He remained at Mine Hill until 1875, when he located at Dover, N. J. In 1878 he removed to Paterson, in order to secure a larger field and greater opportunities. Here he worked until his recent death on Dec. 13, 1924.

On November 15, 1876, Dr. Harris married in Paterson, Margaret Rowson, of that city. He engaged in general practice in Paterson until 1894, when he took up the practice of gynecology exclusively, and this special field occupied his time and his energies until the end of his career. He became connected with the Paterson General Hospital in 1887, at which time the Hospital's out-door department was opened with Dr. Harris as president of the new clinic, and he delivered the speech which opened the clinic. He was on the building committee when the present Paterson General Hospital was erected, and was also on the building committee when the Passaic General Hospital was built, and organized its training school, personally examining the original applicants for entrance. He became

a member of the regular staff of the Paterson General Hospital in 1891. In 1899 he received the appointment of Visiting Gynecologist, with Dr. Balleray as chief. On the death of Dr. Balleray in 1920, Dr. Harris became Chief of Gynecology, a position which he held at the time of his death.

The following is a list of his titles and appointments:

Degrees.—M.D. and F.A.C.S.

Hospital relations.—Visiting Gynecologist to the Paterson General Hospital. Visiting Gynecologist-in-Chief to the Passaic General Hospital from the beginning of the Hospital, and for 23 years thereafter Consulting Gynecologist to the Passaic General Hospital, the Barnet Memorial Hospital, the New Jersey State Hospital and the Alexander Lynn Hospital.

Society relations.—Ex-President of the Passaic County Medical Society; First Vice-President of the American Medical Association, 1912-1913; Ex-President of the New Jersey Medical Society, 1921; and Ex-President of the Society of Surgeons of New Jersey, 1920. Fellow of the New York Academy of Medicine, New Jersey Medical Society, Society of Surgeons of New Jersey, American Gynecologic Society, and the American College of Surgeons. Honorary Fellow of the Morris County Medical Society and the Tri-County Medical Society of New Jersey. Corresponding Fellow Obstetric Society of Paris, France, 1894.

Whereas, Death having removed from us Philander Abbey Harris, a member of the Passaic County Medical Society for more than forty years; and recognizing the fact of the unusual abilities; his careful attention to the minutest detail constituting him second to none as a surgical diagnostician; his transcendent natural mechanical faculty assuring the unvarying success of his operative work, admitted by those most competent to judge; where improvement on conventional methods was indicated and inventing of original methods and instruments; undaunted by obstacles his courage persisting until the end aimed at was gained; and

Whereas, His social qualities being shown by his willingness to entertain and his thorough enjoyment of all fraternal social gatherings; and

Whereas, Dr. Harris' professional activities being known and exhibited not only in our immediate locality, but extending throughout this and adjacent states, bringing honor and notoriety to our Society, and acclaiming him a leader in the foremost ranks of gynecologists;

Therefore, Be It Resolved: That the Passaic County Medical Society suffers a severe loss in the death of Philander Abbey Harris, a loss that we deeply deplore; and that we share the sorrow with his family in their affliction.

And Be It Resolved: That a copy of these resolutions be sent to his family.

G. Edward Tuers, F. H. Todd,  
James M. Stewart, J. A. MacLay.

#### Ridgewood Medical Society.

Harry S. Willard, M.D., Secretary.

The regular monthly meeting of the Ridgewood Medical Society was held Wednesday evening, Jan. 21 at the home of Dr. William Tomkins, at Upper Ridgewood.

In spite of the inclement weather, there was a large attendance of the local physicians, and

Dr. William Spickers of Paterson was a guest of the society.

Considerable discussion was held over the Bills about to be presented by the Welfare Committee of the State Society; particularly the one which refers to the protection of the title of "Doctor", and also that being presented by the Chiropractors which provides for a separate board of examination.

The society is heartily in accord with the efforts of the Welfare Committee to put the first Bill over, and are equally opposed to the adoption of the second.

A committee was appointed to secure copies of these Bills and then to take the matter up personally with the local legislators.

The Publicity Committee reported that an ordinance had been passed in the Village of Ridgewood making the inoculation of dogs, for the prevention of rabies a necessity in order to secure license for these dogs. After a general discussion, a committee consisting of Drs. Chester A. Stone and Joseph Payne, was appointed to draft a letter to all local Boards of Health and municipal governing boards of the various localities surrounding Ridgewood, petitioning these authorities for the adoption of similar ordinances in their respective localities.

Dr. Spickers entertained the club with a very interesting account of a recent trip to the Bermudas, following which a repast was served, and adjournment taken at a late hour.

#### SOMERSET COUNTY.

Dan S. Renner, M.D., Reporter.

The regular meeting of the Somerset Medical Society was held in the Court House, Somerville, N. J., Feb. 12, 1925. In the absence of both the president and vice-president, the meeting was called to order by the secretary, Dr. A. A. Lawton. Dr. C. R. P. Fisher was appointed temporary president.

Dr. Vincenzo Maturi and Dr. Geo. L. Mack of Bound Brook were elected to membership in the society.

The necessity of Early Diagnosis and Treatment of Cancer was discussed and a committee was appointed to devise means of bringing this before the public.

The local milk supply was discussed and a committee appointed to confer with the local Board of Health and the City Council urging them to put into effect at an early date an ordinance requiring all milk distributed in Somerville to be pasteurized or Grade A. This ordinance has already been passed by the Board of Health.

Our president, Dr. F. A. Wild is spending his vacation in Florida.

#### Deaths.

PECHIN.—Edward C. Pechin, widely known Camden physician, died at his home, 301 Cooper Street, at 1:30 a. m., Feb. 16, after an illness of but 3 days, of spinal meningitis.

BLAKE.—Dr. Duncan Blake, Jr., of Gloucester City, New Jersey, died Feb. 14, 1925, after an illness of two weeks from pneumonia.

CLEMENT.—Dr. Ruth Clement, of National Park, New Jersey, died Jan. 26, 1925. She had been for some years an active member of

the Gloucester County Society and of the New Jersey State Medical Society.

KENT.—Dr. George R. Kent, of No. 37 Eighth Avenue, Newark, died on Feb. 15, 1925, at the age of 84 years. He had been suffering for some time from bronchitis and, while apparently improving was suddenly stricken with an attack of cardiac weakness and expired. (See note in Essex County Society report in this issue).

SPROUL.—Dr. O. H. Sproul, for nearly sixty years a practicing physician in Flemington, died at his home Friday morning, Feb. 13, 1925, at 5:30 o'clock. Death was caused by cancer of the stomach from which he had suffered about six years.

Dr. Sproul was in his 81st year. He was born May 29, 1844, in Middlesex County and was graduated in medicine from the University of Pennsylvania in 1866. Soon after he went to Stockton and after practicing there for 24 years came to Flemington in 1890. He served one term as surrogate of Hunterdon County, and he was a Mason and Knight Templar.

Dr. Sproul is survived by two daughters, Mrs. V. C. Hyde and Mrs. Eleanor Painter.

Funeral services to which the public was invited were held from the Baptist church, Tuesday, Feb. 17, 1925, at 11 o'clock.

"One by one the older residents of our community are removed. After a brave fight lasting 6 years—a fight which no one more than he realized must be a losing one, Dr. O. H. Sproul died last Friday morning.

Dr. Sproul was a country physician of the old school, although his professional knowledge was broader and more up-to-date than that of most general practitioners of his generation, his mind was always open to the newer phases of medical science and surgery, as was shown by his lifelong and active interest in the county, state and national medical societies.

For fifty-eight years Dr. Sproul practiced medicine in Hunterdon County, perhaps longer than any other physician in its history. In his more active days no hardship was too great for him to endure, no night too cold or too stormy, no road too long or too rough for him to travel, if at the end of it lay one whom he could relieve and assist back to health. His passing will be regretted by hundreds in whose homes his visits brought not only the comforts that his profession enabled him to administer but a kindly presence, a genial personality, a true friendliness—qualities which contributed toward his success as a healer quite as much as his prescriptions or the strokes of his scalpel. No one knows the bounds of the good Dr. Sproul has done in his lifetime of practice. And who would gainsay that his chief love was to serve his fellow man. In thousands of instances he gave his professional knowledge, expended his time and energy to receive nothing in the way of compensation.

Dr. Sproul was of a school of physicians that time is fast removing. They had the wherewithal to relieve suffering, to restore health and they gave of it freely to rich and poor alike. The extent of the usefulness of this long life lived in Hunterdon County, will never be measured, nor we fear, will it be appreciated as it should be."

—Hunterdon County Democrat.



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## PREVENTION AND RELIEF OF HEART DISEASE.

WM. D. STROUD, B.S., M.D.,

Visiting Physician, Pennsylvania Hospital; Instructor Cardiology, Graduate School of Medicine, University of Pennsylvania; Secretary of Philadelphia and Pennsylvania Heart Association.

(Read before the meeting of the Atlantic County Medical Society, November 14, 1924.)

Although the expectancy of life for man has doubled in the last hundred years, until recently there has been no determined effort to check the ravages of heart disease. "The Captain of the Men of Death" still leads an enormous army. Certainly we cannot be called too optimistic in expressing the hope that, with the benefits of the experience attained in preventing tuberculosis, before us, we may be able to reduce the mortality in heart disease to, at least, the same extent in the next 20 years, which in the past 20 years it has been reduced in the "White Plague".

To quote Dr. Haven Emerson's<sup>(1)</sup> Shattuck Lecture, in 1921, "It is within the realm of possibility, within the reach of present day medical and social knowledge and resources to make as much reduction in sickness and premature death from heart disease as has been obtained by teaching, by diagnosis, by organized medical services in the control of tuberculosis. We have seen first one and then another of the national volunteer efforts in preventive medicine abandon the exclusive methods and arguments of the fanatic, the dramatic appeals of the hobbyist, and arrive at a stable program of endeavor which accepts and includes the facts that disease control depends on general elevation of the health of all people, and that no age, sex, occupation or race group can long maintain an advanced position of healthfulness without the interest and assistance of all the rest."

It appears to us, the older the clinician the more skeptical he is of the possibilities of attaining our objects. He has toiled for years attempting to prophesy the future to patients who will not



be warned. He realizes that unless the effort is nation-wide it cannot be successful. In order to attain our object each individual physician must work toward the one goal. That goal is education. Above all we must be optimists, with a definite ideal and a definite faith; with the will to help our fellow-man, in spite of his apparent desire not to be helped.

Our work unfortunately meets its greatest obstacle among the general practitioners. Instead of coming through them it has necessarily come through hospitals and hospital dispensaries, and has been stigmatized as an effort to pauperize the community, and take from the physician his lawful fee. He deserves sympathy in this attitude, as he has never had the opportunity of offering proper convalescent care, vocational and occupational guidance and replacement in suitable occupations for his patients through handicap bureaus; and has never been given adequate methods with which to keep up with the progress in the diagnosis and treatment of heart disease. It is the greatest hope of those interested in this movement, that as each individual physician finds it possible to supply the above remedies for each of his heart cases, he will be the main source from which these organizations will receive their beneficiaries. One of the main objects of the American Heart Association is to so organize local Heart Associations that it may be possible for all cardiac patients, rich or poor, to not only receive, as in the past, advice as to how to plan their future lives, but actual assistance in arranging for removal of foci of infection, for prolonged convalescent care, following the infections which damage their hearts, until the infection is entirely quiescent and a recurrence unlikely; education in special Trade Schools toward an almost endless list of suitable skilled occupations, and then through bureaus for the handicapped a final placement of these patients that they may carry on productive lives. As Sir Thomas Lewis, of London, has said "No individual should be allowed to hold a non-laborious occupation until those, unable to carry on laborious occupation, due to physical handicaps, are placed at remunerative work."<sup>(2)</sup>

As has been well proven in our efforts with the disabled veterans, this is a mighty difficult problem to be satisfactorily solved, but we believe it must ultimately be solved. At present it is almost impossible for an individual to obtain occupation of any type if he has a heart murmur, be that murmur organic or not. This has come about by the rapid and superficial physical examinations made before employment is permitted by the large factories and industrial plants. They are forced to make these examinations by State Compensation Laws. Thus a law designed to protect the employee is unjustly keeping many out of work.

This paper is raising numerous unanswered problems in the

relief of heart disease, but I trust is suggesting, to some, definite means for attacking this problem, as general practitioners, in many specific cases. We must realize that it is the lack of attention to detail in treating our heart patients who do not need medication, but a careful planning of their lives for the future, which throws these private patients into dispensaries where such a plan is put into effect by trained social service workers. If we wish to hold our patients we must assume this responsibility and it is the hope of all Heart Associations to make it possible for the general practitioner to do this. He must plainly state the situation to the patient, and outline his future life for him.

By what methods are we to attack this dread disease? Let me repeat, by *education*. Through Heart Associations organized in New York City, Philadelphia, Chicago and Boston this education is progressing. Pamphlets upon the Prevention and Relief of Heart Disease; Marriage and Pregnancy in Those with Heart Disease; Occupations for Cardiacs; Heart Disease in School Life; popular lectures as to the cause and methods of the prevention of heart disease; all may be supplied to the lay public through the organization of local heart associations. Any such worthy association will receive support from the American Heart Association organized in Chicago last June, during the meeting of the American Medical Association. It is planning methods whereby the entire country may be districted, by securing members interested in this work. Its first annual meeting will be held in New York in February 1925, when permanent officers will be elected, and a determined drive to reduce the death rate from heart disease will be launched, in conjunction with local associations already organized. Let me urge you to form such an organization here in Atlantic City. There is room for it I am sure, and with its organization the prevention and relief of heart disease will rapidly gather impetus. In Philadelphia we have over 400 members, much the largest proportion being made up of laymen. They are the ones who conduct the convalescent homes, who form the bureaus for the handicapped, who open the Trade Schools and teach occupations to the handicapped. Through such an association, special lectures are given, literature is distributed and a central organization is established which keeps alive a steady determination to eradicate one of the causes of pain and death which unconsciously has taken its place in the minds of us all, as inevitable. We must remember that according to a statistical survey, by Louis I. Dublin<sup>(3)</sup>, "under 25 years of age organic heart disease causes as many deaths as typhoid fever; between 25 and 34 years, organic heart disease causes as many deaths as lobar pneumonia; between 35 and 44 years, organic heart disease causes more deaths than Bright's disease and after 45 years, organic heart disease shows a higher death rate than any other cause."

What can we offer the doctor in the manner of prevention and relief of heart disease?

(1) Definite proof in a large children's clinic by Dr. St. Lawrence<sup>(4)</sup> at St. Luke's Hospital in New York, of the reduction of the recurrence of acute rheumatic fever by almost 100% in children in whom a *successful tonsillectomy* has been performed.

(2) A definite reduction in the number of cases of acute rheumatic fever coming to the largest hospital in New York, as reported by Dr. Alexander Lambert<sup>(5)</sup> during the past few years, where active removal of diseased teeth and tonsils has been gaining headway in New York City, due to propaganda issued by the New York Association for the Prevention and Relief of Heart Disease.

(3) The Shick test, and if indicated the toxin-antitoxin immunization for diphtheria—a large factor in the cause of acute cardiac deaths in children.

(4) The Dick test for susceptibility to scarlet fever and the possibility of development of a technic for its prevention. We must remember that scarlet fever, all too often, especially if joint symptoms are associated with it, is the definite cause of valvular heart disease in children.

(5) The wide-spread attack upon venereal disease, with early treatment during the primary stage, which if successful, practically eliminates syphilis as cause of cardiovascular disease.

(6) The realization that arteriosclerosis with hypertension is often familial in type; that the life of the average American could not be better designed to produce arteriosclerosis, hypertension, and finally myocardial failure; a realization that the plans to prevent this vicious cycle must be made in youth and carried out through middle life.

(7) Annual complete physical examinations for all. These are some of the more tangible facts which we have to offer for the prevention of heart disease.

An understanding of the true causes of heart disease, their early origin, the gradual breaking down of the cardiac reserve with ultimate myocardial failure is a subject absolutely misunderstood by the public. If we are successful in our plan of education, each individual patient will give better coöperation to the physician, a more accurate diagnosis, prognosis and treatment will be possible, and there will develop a better realization as to the possibilities of preventing heart disease. In the presence of heart disease the possibilities for the consummation of a life worth while, in spite of such a handicap, will be better understood by physicians and patients alike.

The first tentative measure for spreading this information was the establishment in 1911, of a special Out Patient Heart Clinic in Bellevue Hospital in New York City<sup>(6)</sup>. Since then this movement



has grown by leaps and bounds, which is natural for a work long past due. At the present there are 142 diagnostic heart clinics throughout the U. S. and Canada. To illustrate the rapidity with which this work takes hold of a community let me take Philadelphia as an example. In that city, never noted for its speed, we started the first diagnostic clinic, at the Pennsylvania Hospital, in February, 1921, with 39 patients. Patients are referred by private physicians, from schools, health centers and numerous charitable organizations, and no patient is admitted to the clinics without the permission of the physician referring such a case. There are now 23 active clinics in that city, annually visited by over 3000 patients! Let me emphasize the extreme importance of making these clinics essentially diagnostic in type, only admitting for treatment those patients absolutely unable to pay for treatment by private physicians. In this way the number of patients referred for complete examination, or more often, brought by physicians for consultation, grows rapidly. This essential object of these clinics can only be attained, however, if complete reports are forwarded, following the examination of patients, to the physicians referring them.

As you may readily see not only do the physicians working in such clinics see varied and instructive cases, but also physicians in general practice—unable to satisfactorily keep up with the literature, as to the development of new methods of diagnosis and treatment—receive outlines of such advances applicable to their own patients, and hence made doubly impressive. Thus in a measure are we assisting to solve the great need of the rural districts, i.e. bringing to the physicians, unable to afford the time or money to take special postgraduate courses, the results of the work in the larger medical centers.

We must admit that we do not yet understand the greatest cause of valvular heart disease in children—namely, acute rheumatic fever and its associated diseases. In spite of 3 years careful work by Dr. H. F. Swift<sup>(7)</sup> and his co-workers at the Rockefeller Institute in New York, they feel they are no nearer the discovery of the cause of this dread disease, nor of its treatment. This does not, however, mean that they or others may not be on the brink of such a discovery, and one of our main objects must be the establishment of an organization capable of rapidly spreading such knowledge as soon as it is obtained.

To summarize, then, our object is to set up an organization through which it will be possible to bring a real knowledge of what causes heart disease, what heart disease really is and the best means of combatting it, to each inhabitant of this great country of ours; to assist every physician in seeing that each of his cardiac patients has the opportunity to carry on a useful life, best suited to his handicap, and that each patient suffering with heart disease realizes that

he may say of his handicap, as Dr. Trudeau did of tuberculosis, "I may die *with* it, but I shall not die *of* it."

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## PNEUMONIA AND ACIDOSIS COMPLICATING DIABETES.

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Case 1574. This patient, an undernourished white male, 36 years of age, 5 feet 9½ inches tall, weighing 126 pounds, was in the Institute in September, 1923, for treatment of his moderately severe diabetes. Family history showed that one member on the maternal side suffered with diabetes. He was discharged at the end of 3 weeks with complete relief from symptoms and his diabetes controlled; the plasma sugar (Benedict) being 0.118% and glycosuria (Benedict's test) negative, on a diet of 100 gm. protein, 80 gm. carbohydrate and 2400 calories; requiring 20 units of insulin daily, 10 units before breakfast and 10 units before supper.

From the date of discharge until November 17, 1924, we saw him only 4 times for blood and urine analyses. The findings on each occasion indicated serious departures from his diet and careless administration of insulin. His last visit, on September 8, was to have a furuncle on his arm incised. He refused at that time to have a blood or urine test, and until seen later disregarded medical advice entirely.

On November 17, he was seen in his home. The history obtained from relatives was that he had continued to increase his insulin dosage independently, in an endeavor to keep his urine free from sugar, until he was taking 70 units per day. On November 8, he had complained of feeling "below par", and on November 13, of pains in the muscles throughout his body, which led his family physician to suspect influenza. His condition became rapidly worse. There was increasing thirst and frequency of urination. With a total loss of appetite he discontinued

the use of insulin on November 15. When seen Monday morning, November 17, he was in a semicomatose condition, suffering from intense air hunger, with a temperature of 104° F., pulse 130, respiration 34. The positive findings from the physical examination were: extreme dryness of the skin, decreased intra-ocular tension, acetone odor on the breath, mucous membranes dry with sordes and herpes on the lips, teeth heavily pigmented, tongue extremely dry, hypermia of the pharynx. He had a dry, hacking, nonproductive cough at intervals. The respiratory rate was increased and the excursion of the right chest was noticeably reduced with increased tactile fremitus and accentuated vocal resonance over the middle and lower lobes. A dull note was found on percussion over the same area. The abdomen was distended and hyper-tympanitic. There was incontinence of urine and feces. Slight pretibial edema was present. The superficial veins were collapsed. The urine examination revealed heavy sugar and acetone, and there was a heavy reaction in the blood plasma for acetone bodies (nitro-prusside). A later analysis showed that before our initial dose of insulin the plasma sugar was 0.885% and the CO<sub>2</sub> combining power of the blood plasma (Van Slyke) was one of the lowest in our records, viz., 10.1 volumes per cent.

With the diagnosis of lobar pneumonia and acidosis complicating the diabetes, we administered insulin in large doses with large quantities of carbohydrate (glucose) and moderate amounts of bicarbonate of soda without delay, and in 2 hours after obtaining partial relief of his respiratory distress we brought him to the Institute in an ambulance (17 miles). After a total dosage of 254 units of insulin during the first 22 hours under observation, with 230 gm. of carbohydrate and 20 gm. of bicarbonate of soda, the plasma sugar had fallen to 0.150%, the CO<sub>2</sub> combining power had risen to 34.2 volumes per cent., and reactions for acetone bodies were negative. Coincidentally the pneumonic crisis occurred and the temperature assumed a normal level.

In treating the pneumonia we placed the patient in Fowler's position, applied sinapisms to the right chest every 4 hours, and gave 15 minims of tincture of digitalis every 4 hours; blood pressure was sub-normal. The diet was kept high in carbohydrate until the blood plasma was free from acetone bodies and the CO<sub>2</sub> combining power normal. November 20, the allowance was reduced to 66 gm. protein, 80 gm. carbohydrate and 1100 calories. November 21, the quantities were the same, but the diet which hitherto had been liquid was now allowed in soft form. November 22, the carbohydrate was further reduced to 70 gm. and a gradual reduction of the insulin dosage begun, partly on account of the lowered carbohydrate intake and partly on account of some return of his carbohydrate tolerance, accompanying the diminished activity of his pneumonic infection. November 29, at 3:20 p. m., he had a slight hypoglycemic reaction requiring 5 gm. of carbohydrate, and the insulin dosage was further decreased. As the patient was already undernourished, we increased the diet on November 30 to 70 gm. protein,



70 gm. carbohydrate and 1400 calories, to prevent a further loss of body weight.

November 30 and December 1, a gradual complete facial paralysis (left) appeared, probably infective in origin secondary to the pneumonia. December 2, we adopted the early and late program<sup>1</sup> of insulin administration, on account of morning hyperglycemia followed by hypoglycemic reactions during the day. December 10, he complained of a "catching" pain at the base of the right lung laterally, made worse with increased inspiratory effort. No friction rub was elicited. On examination the following evening, a small effusion was made out, increasing with the disappearance of pain, to a level marked by joining the fifth rib in the mammary line, sixth interspace in the midaxillary and the eighth interspace in the midscapular. His temperature was slightly elevated, 99° F., with a pulse rate of 86 and respiration 22. We delayed doing a thoracentesis, first because repeated white cell counts showed a decrease in the number of leukocytes; second, the temperature showed no further elevation; and, lastly, the insulin requirement was not increasing but rather decreasing, leading us to believe that the effusion was not purulent. To facilitate absorption the diet was made salt-free and the patient purged with magnesium sulphate. On December 14, temperature, pulse, and leukocyte count were normal, and the size of the effusion greatly diminished. December 17, chest findings were entirely negative. Complete recovery from the facial paralysis ensued. The patient began to gain strength rapidly and was discharged December 21 free from symptoms, with his diabetes under control, with a diet of 70 gm. protein, 80 gm. carbohydrate and 2000 calories, requiring 70 units of insulin daily (32 at 7:00 a. m., 22 at 11:30 a. m., and 16 at 7:00 p. m.) as shown in the chart on the following page.

This case presents illustrations of some of the difficulties and problems ever threatening the susceptible diabetic patient.

Primarily it exemplifies the danger of disregard for accurate estimation of diet and careless administration of insulin, which has again been pointed out by Allen<sup>2</sup> in a recent paper read before the Academy of Medicine, Cincinnati.

It further illustrates the danger in omitting insulin when there is loss of appetite in the presence of infection. The "insulin patient" cannot be warned too strongly that in event of loss of appetite he should take all the carbohydrate in the prescribed diet, even if it must be taken in liquid form, so that he will be enabled to use enough insulin to avert an acidosis.

That there had been a definite injury to the carbohydrate tolerance from allowing the blood sugar to remain at a level far above normal for a great length of time, and also from the severe infection, can be readily observed by comparing the insulin requirement of 20 units per day on a diet of 100 gm. protein, 80 gm. carbohydrate and 2400 calories at discharge in September, 1923, with the dose now required, namely 70 units

## CHART—CASE No. 1574

Diet				Urine				Blood Plasma				Insulin total dose lbs.	Wgt. lbs.	Remarks
Date	Prot.	CH.	NaCl	Calories	Dextrose	Acetone	Sugar	NaCl	Urea	CO <sub>2</sub>	Vol.			
1924	gm.	gm.	gm.	gm.	gm.	gm.	per 100c.c.	per 100c.c.	per 100c.c.	%				
Nov. 17	230	920	heavy	heavy	heavy	heavy	*885	573	26	heavy	10.1	254		*2.00 a. m.
							*750			"	11.0			*4.00 "
18	40	166	trace	914	faint		*240			"	34.2			*4.00 p. m.
19	60	160	tr. tr. 0	900	mod. 0		*150			neg.	46.8	190		*9.00 a. m.
20	66	80	hy. - -	1100	hy. - -		*366			"	42.0	134		*9.00 "
21	"	"	- hy. 0	"	- mod. hy.		*127			"	50.7	104		*8.00 p. m.
22	70	"	- - -	"	- - -					0	42.0	98		
23	"	"	0 - -	"	0 - -		300			0	43.9	92		
24	"	"	0 - hy.	"	0 - vf.							92		
25	"	"	0 hy. 0	"	0 ft. mod.							94		
26	"	"	0 - -	"	0 - -							98	126	
27	"	"	0 - 0	"	0 - -							98		
28	"	"	0 0 0	"	0 0 0		187			0	50.7	90		Hypoglycemia (CH gms. 5)
29	"	"	0 0 -	"	0 0 -							86		
30	"	1400	0 0 0	"	0 0 0							86		
Dec. 1	"	"	0 0 0	"	0 0 0							86		Hypoglycemia (No CH.)
2	"	"	0 0 0	"	0 0 0		230			0		*86		Facial paralysis (L)
3	"	"	0 0 0	"	0 0 0							86	124	
4	"	"	0 0 0	"	0 0 0		153			0		82		
5	80	2000	0 0 0	"	0 0 0							82		
6	"	"	0 0 0	"	0 0 0							78		
7	"	"	0 0 0	"	0 0 0							76		
8	"	"	0 0 0	"	0 0 0		150			0		76	125	
9	"	"	0 0 0	"	0 0 0							76		
10	"	"	0 0 0	"	0 0 0							72		Pain in left chest.
11	"	"	0 0 0	"	0 0 0							70		Pleurisy with effusion.
12	"	"	0 0 0	"	0 0 0		130			0		70		
13	"	"	0 0 0	"	0 0 0							70		
14	"	"	0 0 0	"	0 0 0							70	129	
15	"	"	0 0 0	"	0 0 0							70		
16	"	2000	0 0 0	"	0 0 0							70	128	
17	"	"	0 0 0	"	0 0 0		136			0		70		
18	"	"	0 0 0	"	0 0 0							70		
19	"	"	0 0 0	"	0 0 0							70	127	
20	"	"	0 0 0	"	0 0 0							70		
21	"	"	0 0 0	"	0 0 0		120			0		*54	127	*Two doses. Discharged.

From November 17 to 20 inclusive on liquid diet.

hy., heavy; tr., trace;  
\* Early and late program.

0, negative; ft., faint; mod., moderate.

daily on a lower diet of 70 gm. protein, 80 gm. carbohydrate and 2000 calories. An increase in weight from 119 to 129 pounds would, however, account for part of this increased requirement.

Finally, in deciding whether or not we should do a thoracentesis, the fact that the insulin requirement was decreasing carried possibly more weight than did the absence of an increase in the leukocyte count and elevation of temperature, providing as it does a diagnostic sign of some importance from a surgical standpoint in diabetic patients using insulin.

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### THE RUBIN TEST FOR STERILITY. REPORT OF 6 CASES.

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Before presenting the cases that were tested with the Rubin Inflation method for determining patency of the fallopian tubes, in cases of sterility supposedly due to obstruction, I believe it would be in order to give a few explanatory remarks concerning the apparatus and the principles of application. We did not use the regular Rubin outfit, but a Currier's modification which is easier to handle.

In applying the Rubin test, the following important points should be kept in mind:

(1) Best time for this test is 3 to 7 days after menstruation; never premenstrual nor during menstruation.

(2) Shaving of patient; sterile gowns and gloves are unnecessary; paint cervix and vagina with iodine; have a sterile bivalve speculum, a bullet forceps and a hollow sound at the end of which is an acorn tip.

(3) Acorn tip should be about 1 to 1½ inches from end of sound, which is shaped to fit the cavity of uterus and cervix. This sound enters the cervix for 1 to 1½ inches above the internal os and acorn should press firmly to cervix so as not to allow the escape of CO<sub>2</sub> other than into the uterus.

(4) The rapidity of the flow of gas should be such that it will take 15 seconds for the mercury to rise 100 millimeters.

(5) If the tubes are patent, the mercury will rise from 60 to 90 mm. and stay there. It may then drop to 40; which indicates that the CO<sub>2</sub> gas is passing through the tubes into the abdominal cavity. We usually allowed 100 to 150 c.c. of gas to pass into the abdomen; which we determined by the number of fluctuations in the bottle, each fluctuation representing 50 c.c. of gas. This procedure should take about 1 minute.



(6) After the patient sits up, having had 150 c.c. of gas pass into the abdomen, she usually complains of pain in the neck and right shoulder. This symptom is caused by subdiaphragmatic irritation of the vagus nerve. If patient is placed in front of fluoroscope, a white line will be seen to separate the liver from the diaphragm—but this is not done as a routine method.

(7) With a stethoscope over the pubis, one can hear gas enter the abdomen.

If the fallopian tubes are completely closed, nonpatent, the pressure rises steadily up to a point as high as one cares to allow. It is inadvisable to allow the mercury to rise above 200 mm., for if CO<sub>2</sub> does not go through at 200 it will not go through at 250, and tubes will not rupture at 200 mm. of pressure. If the Hg. rises to 180 or 200 and then suddenly drops to 60 or 80 mm., this shows that patency of the tubes has taken place through the breaking down of some of the adhesions. One of my case reports shows this condition and proves the therapeutic as well as the diagnostic value of the apparatus.

The dangers of the Rubin test are theoretic and the incidence of morbidity is insignificant. No bad results have been reported in spite of the large number of cases in which it has been used. Contraindications to its use are arteriosclerosis, myocarditis, infected cervix, and pelvic inflammatory conditions accompanied by fever and pain. Any contraindication to intra-uterine manipulation, is likewise a contraindication to use of this test. The fallopian tubes will not rupture if the pressure does not rise too rapidly and provided a pressure of 200 mm. Hg. is not exceeded. No pain is experienced from passage of the gas through fallopian tubes except at right shoulder. The gas is absorbed in 15 or 20 minutes and patient may walk home.

With these preliminary remarks, we will now proceed to the case reports.

Case 1.—Mrs. C. W., an adult female, white, age 19, married 2 years. Menstrual history: Started at 14 and recurred every 28 days, lasting 3 to 5 days. Entered hospital for pain in R. L. Q. Diagnosis: Chronic appendicitis and sterility. While under anesthetic, Rubin test was made. Tubes found patent, Hg. rising from 80 to 90 and remaining there. Allowed 150 c.c. of CO<sub>2</sub> to enter abdomen. Laparotomy corroborated the findings. The pelvis found to be normal, appendectomy was done.

Remarks: In this case, we suspect the husband, who refused to be examined. Due to lack of time and proper place, Huhner test was not done. Postoperatively, the vaginal discharge was found to be of normal acidity.

Case 2.—Mrs. M. W., age 26, married 4 years, anxious for child. Menstrual history: Started at 15, recurred every 30 days and lasted

5 days. Dysmenorrhea and pain in right ovarian region. Admitted to hospital 4 months ago and appendectomy and right salpingo-oöphorectomy was done. On Nov. 11, 3 months later, she was taken to clinic and Rubin test made, and this disclosed nonpatent remaining left tube.

Remarks: During laparotomy, the left tube appeared normal. Had the Rubin test been done at that time and a nonpatent tube been found, a plastic operation might have been performed.

Case 3.—Mrs. E. N., age 34, gave menstrual history commencing at age of 15, recurring every 28 days and lasting 5 days. Married 8 years and sterile. A right salpingectomy had been done 2 years before for pyosalpinx. Dilation and curettage was performed 6 months previously for the sterility. Rubin test at clinic showed nonpatency of remaining left tube; Hg. rising to 200 mm.

Remarks: Had the Rubin test been done 6 months before it would have obviated an unnecessary dilation and would have suggested a plastic tube operation instead. According to Dr. Irving F. Stein, of Michael Reese Hospital, in the September issue of Clinics of North America, some operators no longer dilate and curette for sterility, but make use of the Rubin inflation method instead.

Case 4.—Mrs. F. B., married 8 years, chief complaint dysmenorrhea and sterility; examination revealed a retroversion. Menstrual history: Started at 14, recurred every 28 days and lasted 3 days. Rubin test in the clinic disclosed a pin-hole external os and nonpatent tubes; Hg. rising to 200 mm. Advised to enter hospital for plastic operation. The Rubin test on the operating table disclosed patency, the Hg. rising to 90 and then dropping to 40—contrary to the finding in the clinic a few days previously.

Laparotomy was performed for the retroversion, with Rubin apparatus attached; both tubes were placed on a napkin and the Rubin test performed while the abdomen was open. Found left tube patent and right nonpatent; this was demonstrated by pinching the left tube and causing a ballooning of right tube, with Hg. rising above 200; when the left tube was released, the Hg. dropped.

Remarks: The fact that a previously nonpatent tube can subsequently be rendered patent by the Rubin test is an indication of its therapeutic value. Rubin claims that one should receive 5 or 6 inflations and that very often a tube that first shows nonpatency may become patent if slight adhesion is the cause of the closure.

Case 5.—Mrs. C. G., age 31, married 6 years, chief complaint for past 4 months vaginal bleeding on least exertion, and sterility. Menstrual history: normal. Vaginal examination disclosed eroded cervix. On Nov. 12, under general anesthetic, the Rubin test was done—revealing nonpatency of tubes. Since no permission was given for laparotomy under any circumstances a low amputation of the cervix was done.

Remarks: Low amputation of cervix will cure her endocervicitis in all probability but will not be conducive to conception because of nonpatency of the tubes. Patient was distinctly told that in order to become pregnant a laparotomy for a plastic procedure would have to be done, if the Huhner test showed active spermatozoa.

Case 6.—Mrs. L. P., treated 6 months ago for a self-induced, septic abortion, presented herself at the office 3 months later complaining of vaginal discharge, for which she received tampon treatment. After the discharge cleared up, Rubin test showed nonpatency of tubes.

Remarks: Here is a case where a fertile woman became sterile through a septic abortion which secondarily involved her tubes in a mass of adhesions.

In conclusion, I wish to state that it is not to be assumed from the above cases that nonpatent tubes are the only cause for sterility. A detailed gynecologic history should be taken to ascertain if any of the other possible causes for sterility exist, and vaginal examination should determine any pelvic causes. The general condition of the patient and any endocrine disturbances should not be overlooked. In other words, for preservation of the possibility of pregnancy there must be a healthy endometrium of the uterus, a patent tube and functioning ovarian tissue and healthy spermatozoa that remain alive after entering the vagina and being able to reach the tubes. No plastic operation should be advised until the husband has been thoroughly examined and the Huhner test made.

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## PRURITUS OF THE PERINEUM.

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Professor of Surgery, Department of Pathology, New York University and Bellevue Hospital Medical College.

(Read before the Hudson County Medical Society, at Jersey City, Jan. 6, 1925.)

One of the most trying problems that the general practitioner meets with in the practice of medicine consists in the successful treatment of cases of localized pruritus. Foremost among the examples which might be given of a localized pruritus whose very severe character renders life intolerable or at least decidedly uncomfortable for some poor individual, is pruritus ani. Closely allied to this condition are those known as pruritus vulvae and scroti. All of these conditions may be logically and conveniently grouped under the title of "Pruritus of the Perineum". The reason being that all three are identical in the principle of their causation and are, in general, amenable to the same therapeutic procedures. Contrary to general opinion, the condition is not trivial and justice most certainly is not done to the patient who is lightly dismissed



with a salve or a lotion. From the standpoint of the patient, the condition is most distressing; it often disturbs his nervous system in such a manner as to put him in a truly deplorable plight where he can neither work by day nor sleep by night. Moreover, in those cases where the anal pruritus is a symptom of chronic visceral disease, the physician who treats these cases with placebo remedies is guilty of very grave neglect.

As is shown in the motion pictures and as is described in any textbook upon the subject, changes do occur in the skin of the pruritic area. Likewise, bacterial invasion does occur. Both of these are factors in the intensification of localized pruritus but after all, in the majority of cases they are but contributing factors. What, then, are the primary factors which we must reach in order to effect a cure? From the practical standpoint of treatment in any particular case, it will be found advantageous to approach the matter from the viewpoint of a diagnostic rather than a therapeutic procedure, since there are at our disposal abundant therapeutic measures the correct selection of which rests essentially upon a correct diagnosis of primary factors.

On the basis of an extensive research published elsewhere, I have come to the conclusion that there are two types of pruritus; the one, direct and the other indirect. Direct pruritus is so called because the itching is due to direct irritation of the nerve endings in the zone to which the itching is referred. Indirect pruritus is so called for the reason that the itching is a referred sensation produced by the visceral disease and not by disease within the area to which the itching is referred. From the standpoint of treatment this is most important, for the reason that local treatment is entirely illogical in cases of indirect pruritus. In this type of case, correction of existing visceral disorders should be the line of treatment. In cases of direct pruritus, however, local treatment of one form or another is to be instituted, depending upon the cause. To briefly state these causes of direct pruritus, the following table is quoted:

#### **Traumatic.**

(1) Abrasion. Use of hard or printed paper for cleansing purposes. Horseback riding, bicycling. Coarse flannel underwear, or underwear which fits too snugly in the peri-anal region. Condyloma or hypertrophic skin tags at the anal margin. Mechanical intertrigo. A continued seated posture.

(2) Avulsion. By repeated overstretching of the anal skin caused by extrusion of hard stool. By pederasty, and rectal onanism, resulting in anal fissure.

(3) Maceration. Excessive perspiration. Uncleanliness. Discharges from leukorrhea, diarrhea, fistulas or sinuses. Poorly dyed underwear.

(4) Compression. Scar of operative wound enclosing nerve fibrils and rendered sensitive thereby.

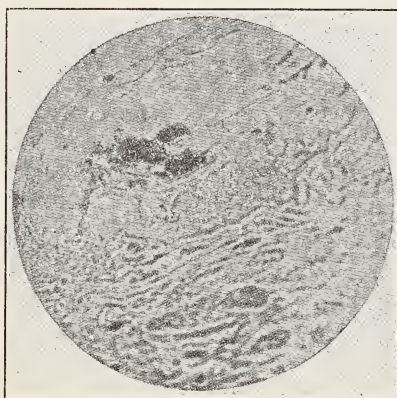
### Infective.

(1) Bacterial. Ulcers in the terminal portion of the anal canal usually between the two sphincters. Burrowings from anal pockets (sinus). Eczema? Erythema? Herpes?

(2) Pediculi, scabies, epidermophyton, pityriasis, trichophyton, threadworms, pinworms.

Those conditions which may give rise to indirect pruritus are, in general, any chronic visceral disease of the pelvic organs or, to a lesser extent, of other abdominal organs. It is in this type of case that we frequently see absolutely no local cause for the terrific itching complained of and such cases are often ascribed to a neurotic tendency on the part of the patient or are naively termed "idiopathic", or "essential" pruritus.

While, as a proctologist, I am of the belief that no general physical examination is complete without a rectal examination, yet I am quite as



Bacteria in epidermal tissues in case of pruritus ani.  
—from "Pruritus of the Perineum."

firmly of the belief that in a case of pruritus of the perineum, no examination of the local parts alone will suffice, but am decidedly insistent upon a general physical examination being made. If this be performed, many cases of the type just described will no longer be "idiopathic" but will be found to rest upon a definite pathologic basis.

Vaccines: Bacterial infection of the skin in a pruritic area is liable to occur in all cases. That it does not occur in 100% of the cases is due either to efficacy of the local barriers to invasion, i.e., the resistance of normal skin and mucosa to invasion, or to the efficacy of the immune powers of the body cells and plasma fluid to resist such invasion. When pruritus continues for any length of time the local barrier to infection

is weakened or broken by the scratching and rubbing incidental to efforts at relief from the itching. This may be observed clinically in the form of excoriations or erosions. With such breaks in the skin, bacterial invasion is rendered easy. The only factor which can prevent infection then is the immune powers of the cells and plasma fluid. When this is normal, invasion is successfully resisted. When it is not up to normal, invasion is certain to occur. Hence, the author urges the use of suitable vaccines in all cases of pruritus showing excoriations or abrasions. The object of such vaccines is to increase immune bodies to such an extent as to successfully resist and destroy invading bacteria. In such a situation, the use of vaccines is an auxilliary curative measure. But to go one step further in the intelligent use of vaccines: they may be used as prophylactic against invasion in every case of pruritus for the reason that then, should excoriations or erosions occur, the immune bodies will be preponderant from the start and invasion will be rendered less likely. The author uses successfully a vaccine of those organisms which his bacteriologic researches have proven the causative agents in such invasion, namely the *Staphylococcus albus* and *B. coli*.

**Operative Procedures:** Operative procedures are only of value in those cases in which, by virtue of sclerosis of the corium, compression of the nerve endings is occurring. This may be determined clinically by an examination of the skin in the pruritic area. If it is found to be thickened and indurated with well developed rugae radiating from the anus, the occurrence of such sclerosis may be presumed. In this type of case an undercutting operation has the beneficent value of breaking the vicious circle between scratching causing sclerosis, sclerosis causing itching, and itching causing scratching. The undercutting operation removes the desire to scratch and allows the tissues to return to their normal structure. The undercutting operation which I have found of most service is one of my own devising and is described in the literature. Undercutting operations of any type should be considered as an auxilliary in treatment and not as an infallible cure. Local pathologic conditions such as fistulas, or cryptitis must, of course, be dealt with or a recurrence of the itching will supervene upon the return of sensation.

The foregoing briefly outlines the subject of pruritus ani, vulvae and scroti. It seeks to call to your attention the fact that beside having local causes for these conditions, we may also have indirect causes, namely visceral disease. There are an abundance of therapeutic measures which will, when properly selected, serve to cure any given case.

The all-important feature in the final cure rests upon recognition of the cause and my effort has been to point out concisely where this may lie in any particular case. More detailed explanation and suggestions are to be found in publications dealing with pruritus of the perineum.



# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if.—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, Newark, N. J.

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## PREPARE FOR THE ANNUAL MEETING.

There are many good reasons why you should attend the annual meeting of the State Society; death or serious illness are the only unanswerable legitimate excuses for absence. You owe it to yourself, to your family and your patients, and to your professional brethren, to attend and participate in the proceedings of this gathering. Bring the family along, that you may the more fully enjoy the social and vacational features of the occasion. Make a vacation, brief though it may be, of these few days and relax from the strain and deadly routine of the regular day's work.

Take part in the scientific program, that you may not only profit by the dissertations of those presenting prepared theses but that you may contribute to the sum total of medical knowledge those things that you have learned in the course of actual practice. Exchange of ideas is the healthy basis of our conventions. You will find it profitable to give to, as well as to receive from, your co-workers in science and art; in fact, it is only through active participation in the general discussions or private conferences, and by the interchange of thought and experiences that you can secure the full benefit of the meeting. your contribution, though in your modesty deemed very small, may be of great importance to someone,—it is conceivable that it may supply the missing link in some highly important studies.

Do not neglect, either, to participate in the business session. Members have been known to criticize the choice of officers and determination of policies after State Society meetings. Remember that if you do not attend the session or do not give expression to your views and preferences, you have no one but yourself to blame for the results. These meetings are held for the purpose of bringing all members into confer-

ence and for taking a consensus of opinion on policies and on the selection of representatives to conduct the Society work. Play your part; or you must perforce hesitate to complain of unsatisfactory developments.

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### DO IT NOW.

Having decided that you will attend the next meeting of the State Medical Society, to be held in Atlantic City, June 18, 19 and 20, commence now to make your preparations, and the first essential is that you should immediately make reservation at one of the hotels. The Chairman of the Committee of Arrangements informs us that there is good reason to anticipate a larger attendance at this annual meeting than has ever been registered before. Headquarters will be located at Haddon Hall, and in as much as that hotel and most of the others in that vicinity will be crowded during the month of June, it is advisable to apply for rooms at once if you would consider your own comfort.

Our Acting-President, Dr. Donohoe, announces a prospective scientific treat in store for those who attend the convention, in that he has secured two of the most distinguished members of the profession to deliver the annual orations. John Frederick Erdmann, Professor of Surgery, New York Post-Graduate Medical School, will present the Oration on Surgery, and John Albert Kolmer, Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania, will give the Oration on Medicine. The knowledge that these masters in their respective fields will speak with the voice of authority upon the latest developments in surgery and medicine, should of itself prove an irresistible attraction.

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### MEDICAL LEGISLATION.

We promised last month to report at this time on the proceedings of the General Assembly of 1925 insofar as they related to medical matters. The annual session of the legislature is adjourned and, while the State Society did not obtain adoption of the bill it presented, there is no occasion for feeling very seriously disappointed; progress was made in some directions and, at least, some other proposed legislation that might have proved obnoxious if enacted into law, was defeated.

The so-called "Doctor's Title" Bill failed of passage, not because of any strong opposition from the public or within the Assembly but because of the unreasonable antagonism of two members of the House of Assembly, one of whom happened to be in a position to control legislative action. The Bill passed the Senate by unanimous vote, was transmitted to the House, and, after a public hearing under the auspices of the Public Health Committee of that body, was reported to the House favorably and without amendments; thus bringing it to the third reading

file whence it was due to be called at a later session for submission to a final vote. At that juncture, a very clever trick was played by our opponents; upon motion of the Republican floor leader, the Bill was recalled and submitted to the Judiciary Committee, for further consideration. And there it remains. In spite of the fact that the majority of that committee favored reporting the Bill back to the House, and in spite of the further fact that a very large majority of the members of the House had promised to vote for adoption of the Bill, every effort to secure its return to the House proved unavailing.

Who is responsible? Primarily, the Honorable Ralph W. Chandless, Assemblyman from Bergen County, majority floor leader and Chairman of the Judiciary Committee, who, though he gave at different times numerous tentative excuses for his action, gave but one applicable reason—that he had made a political deal with an associate, Honorable Thomas M. Muir, of Union County, whereby this Bill was to be sacrificed in payment of a personal political obligation. Secondly, responsibility falls upon the said Mr. Muir, who gave no other reason than his general opposition to anything the medical profession might desire.

The future political fate of these two distinguished members of the Legislature of New Jersey should be carefully considered by the members of the medical profession residing in their respective districts.

While Senate Bill No. 132 was the only proposed law directly sponsored this year by the Welfare Committee of the State Society, there were other bills presented that bore more or less directly upon the interests of the profession.

The State Board of Medical Examiners introduced two measures, and both were adopted. Assembly Bill No. 135 is designed to correct a fault in the present law whereby licenses are required to be granted without examination to ex-service men who study chiropractic in the course of vocational training provided by the United States Government. The amendment proposed was to admit such candidates to *examination* for license. The bill as finally passed, still exempts from examination ex-service men who were residents of New Jersey but requires such candidates from other States to take an examination.

Assembly Bill No. 227, also introduced at the instance of the Board of Examiners, requires that every applicant for a license to practice medicine in this State shall submit satisfactory proof that he is "a citizen of the United States or has declared his intention of becoming such a citizen".

Assembly Bill No. 449, a proposal to establish a separate Board of Chiropractic Examiners, made its reappearance but was killed in committee. The same fate befell Assembly Bill No. 279 intended to establish rules for the licensing of a new cult, under the name of Naturopathy.



Assembly Bill No. 106, granting permission for physicians to give "birth control" information to married persons, was again defeated. Senate Bill No. 240, authorizing eugenic sterilization to prevent procreation of persons of defective mentality, passed the Senate but was strangled in committee in the House.

A few other bills of minor importance to the profession became laws: The State Department of Health secured the passage of several acts relating to public health matters; a special bill, Assembly No. 47, authorizes cities not operating a municipal hospital for infectious diseases exclusively, to contract for the care of patients in privately maintained hospitals; and, the Department of Labor secured an amendment to the Employer's Liability and Compensation Act whereby the Commissioner may allow in specific trial cases "a reasonable fee for medical witness or expert medical testimony", just as the law already provided for the costs of general witness fees and a reasonable attorney fee.

This summary of the medical legislation considered by the recent General Assembly is presented without comment on the individual measures, save as regards the one bill upon which the Welfare Committee concentrated attention, because that committee will shortly resume its meetings for review of the whole situation and for consideration of its future policy, and will doubtless present a formal report at the coming annual meeting of the State Society.

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## In Memoriam.

### OBADIAH H. SPROUL.

Whereas, The Trustees of the Medical Society of New Jersey learn with deep regret of the demise of our Fellow, Dr. Obadiah H. Sproul, and

Whereas, Dr. Sproul has been a rare example of faithfulness and an inspiration to all who knew him; for half a century he missed but three meetings of the State Society, and for thirty-one years was a Fellow. For several years he acted as presiding officer of the Board of Trustees. We have all known Dr. Sproul as an ideal physician, a fine colleague, and a gentleman of extraordinarily high ethical attainments; therefore be it

Resolved, That the Trustees of the Medical Society of New Jersey wish to record deepest regret at losing so helpful a Fellow, and to express to his family sincerest sympathy in their great loss.

C. R. P. Fisher and Edward J. Ill, Committee.

### GEORGE R. KENT.

The Practitioners' Club of Newark voices its sorrow in the passing away of their late associate, Dr. George R. Kent, and desires to record on its minutes a tribute to his memory.

Dr. Kent became a member of the Society on October 5, 1896, and upon his death was one of its oldest members. His great interest in the welfare of the club, together with his regular attendance and genial personality, made of him a member beloved by all. He was upright and conscientious in his medical work, and the club deplores the loss his death has brought, not only to it, but to the public at large.

The club extends to the members of his family its appreciation of his sterling worth, and deepest sympathy in their loss.

Committee: J. D. Lippincott, Edward J. Ill and Richard J. Brown.

## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal post-graduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

### Blood Transfusion.

With blood transfusion an established therapeutic measure, attention has been directed recently mainly to the source of supply and the best methods of conducting the procedure. On the question of universal donors, an interesting suggestion is made by Geoffrey Keynes (*Brit. Med. Jour.*, London, p. 613, Oct. 4, 1924) that the various organizations of Red Cross workers may afford a solution of the problem. It is necessary to have a properly organized supply of volunteer donors, from outside the hospital and among healthy individuals, who will not have to be subjected to undue moral suasion, and in the Red Cross we may expect to find groups of persons who answer exactly to these needs. Acting as blood donors entails no suffering and only a temporary disability. A healthy young man can part with 750 c.c. of blood, or even more, without any immediate effect. Men are said to be more suitable as donors than women, but a donor should be between 20 and 40 years of age, and he must be free from syphilis or malaria. As regards the blood group of a prospective donor, it has been customary to refer to individuals belonging to Group IV of Moss as universal donors; however, it is safer to give some patients, especially in diseases like pernicious anemia, blood of their own group.

Lyle B. West, (*Amer. Jour. Surg.*, 38:250, Oct., 1924) advises that in selecting donors for blood transfusion there are 3 absolute prerequisites: (1) A negative Wassermann; (2) an erythrocyte count well above 4,000,000, with a normal differential white count; and, (3) compatibility tests, either cross agglutination and hemolysis tests of the donor and recipient, or grouping, or both. In an emergency the first two may be omitted, but never the matching of the bloods.

This same point is touched upon in an interesting communication from Jubé (*Jour. de chirurgie*, Paris, 24:522, Nov., 1924), who presents a simplified method for determining compatibility of the receiver's and donor's bloods,

after the manner known in France as the direct Jeanbrau test. A drop of the receiver's serum, obtained by venous puncture an hour previously, is placed on a slide illuminated from below, and a drop of blood obtained by pricking the donor's finger tip is mixed with it. If agglutination occurs, the donor must be rejected. This test, though requiring 45 to 60 minutes, is a reliable one. Of course, in absolute emergencies any available blood may be tried. This can be done as a slowly progressive measure, however, and some information obtained from the manner in which the blood is received. If 20 to 60 c.c. produces dyspnea, violent lumbar pain, air hunger or pupillary dilatation, the process must be discontinued. If 60 c.c. fails to produce any untoward reaction, the blood may be considered safe. Such a dose is never fatal and even so small a quantity of transfused blood may prove beneficial.

Whether to use whole blood and the direct method of transfusion, or the indirect citrate method has been much discussed again in recent literature. Bacon (*Minnesota Med.*, 7:725, Nov., 1924) says that the objections to the citrate method have been based mainly upon the reactions that frequently follow its use, and it has now been clearly established that such a complex and delicate physiologic product as blood is altered, not only in its physical state but in its biologic properties, by the chemical treatment. Among users of the citrate method, reports show from 25 to 60% of reactions, which makes it highly desirable that some method shall be perfected for the direct transfusion of unaltered blood. So far, rapidity and gentleness of manipulation have been the main reliance in this procedure. Intermediate containers are used whose surfaces have been coated with nonirritating compounds to delay the inception of coagulation. In the paraffin tube method, a glass container, coated on the inside with melted paraffin, and provided with a rubber tube for insertion into the vein, is employed. Unger has recently contrived a mechanical apparatus that promises advantages over this method, however. His machine consists of a round box-like affair with 4 outlets, to each of which a piece of rubber tubing may be attached. Two of these, on opposite sides, have needles to enter the veins of recipient and donor, respectively; the third is connected to a syringe of 50 c.c. capacity, which is well lubricated with paraffin oil; and the fourth is attached to a graduated funnel of saline solution. A cover fills the box, is grooved on opposite sides, and rotates through 90°. When transfusion is started, the cover is turned to the point where the syringe can be filled from the donor's vein while saline runs slowly into the recipient, keeping the needle and tube free from blood so that no clotting can take place to obstruct the lumen. Then, the cover may be rotated to the point where the blood can be forced out into the recipient's vein while saline runs into the vein of the donor. This procedure may be repeated as often as necessary and it would seem that in cases requiring repeated transfusions, this Unger device would be more satisfactory than any other yet suggested.

Olav Hanssen (*Acta med. scandinavica*, Stockholm, 7:204, 1924) says he can see no reason to abandon the defibrination method



in favor of the citrate. As to Host's objection that 20% of the blood is lost in defibrination, he points out that the loss amounts only to 10% when large quantities are defibrinated without glass beads. Host further objected that the blood is deprived of fibrin and blood-platelets, but we do not know whether this has any bearing on the result. On the other hand, the addition of citrate may also lead to changes in the reactions, the significance of which we are unable to judge. Hanssen compares a series of 36 transfusions of defibrinated blood during 1914-1923, with a series of 74 transfusions during 1909-1912. In the latter group the largest transfusion amounted to 570 c.c., with an average of 242 c.c. and a total quantity of 17.94 liters distributed among 29 patients. In the more recent series, between 900 and 1000 c.c. were transfused in 2 cases; the average was 561 c.c., and the total amount 20.2 liters was distributed among 24 patients. Hemoglobinuria was never observed, nor had the operation ever to be discontinued on account of untoward symptoms. About an hour after operation, a rise in temperature occurred fairly regularly, frequently accompanied by shivering and sometimes by vomiting; the subsequent invigoration, however, was never interfered with by this reaction.

It is interesting to note that Hanssen reports results in pernicious anemia, similar to those gained by intravenous transfusion, through the use of intramuscular injections of non-defibrinated blood; about 20 c.c. of blood was aspirated from the vein of a donor and immediately injected into the gluteal muscle of the patient. The injections could be repeated daily or at longer intervals and the only undesirable symptoms ever observed were local tenderness and fever, and these were seen but rarely.

Schumacher, (Klinisch. Wochschr., Berlin, 3:2058, Nov. 4, 1924), states a strong preference for direct blood transfusion by Oehlecker's method. As to the choice of donors he does not consider relatives superior to other persons. He claims excellent results following direct transfusion in cases of atonic secondary hemorrhage after labor, hemorrhage after incomplete abortion, severe hemorrhage from ruptured varices, and in women suffering from myoma of the uterus and who had become very anemic from menorrhagia.

Siperstein, (Minnesota Med., 7:657, Oct., 1924) has indicated a new procedure of value particularly in treating infants; i.e., intraperitoneal transfusion with citrated blood. Freshly prepared 2% citrate solution is used in the customary proportion of 10 c.c. to 100 c.c. of blood and the blood kept at body temperature and strained through gauze, is immediately injected into the peritoneal cavity, abdominal puncture being performed in the usual way. Reaction is comparable to that following the intravenous method, but less severe, and in more than 50 clinical applications he has observed no harmful effect from this procedure.

Dolby and Mooro (London Lancet, 207:547, Sept. 13, 1924) report an experience of 42 blood transfusions with whole blood and 12 with citrated blood. The conditions treated were primary hemorrhage, secondary anemias and deficiency diseases, and, though it is not

definitely so stated, results seem to have been equally good with either method.

Spiedel, (Northwest Med., 23:518, Nov., 1924) has published observations on 300 cases of blood transfusion, and concludes that transfusion is of value in anemia following hemorrhage, in postoperative shock and as a pre-operative measure; in sepsis and purpura hemorrhagica, the final results are variable; in pernicious anemia it is merely palliative. He abandoned the citrate method because of the serious reactions encountered, and substituted direct transfusion with the aid of the Kimpton-Brown tubes.

Finally, Martin Lewis Janes (Med. Jour. & Rec., 121:16, Jan., 1925) relating his experience in a series of 15 cases of subacute and chronic infection, concludes with the advice that, generally speaking, whole blood, because of its nutritive and bactericidal properties, is an excellent stimulant; blood transfusion is of unquestionable value in combating infection, toxemia and bacteremia and in overcoming anemia; it should not be used as a last resort, but as a therapeutic measure and no person whose response to infection is below normal should be allowed to struggle on against infection without the stimulation of blood transfusion.

## In Lighter Vein

### Country School Essay.

(This composition turned in to a teacher by a pupil in a rural school has not been altered.)

#### SPELLING

Spelling is how the way letters comes in a word. It is not hard if you study good, but if you go out and play all time you aint got no time to study and you get bad marks by teachers book. You want to study good your spelling because if you dont spell good you cant get to be big man, because big man got to spell good.

—American Legion Weekly.

He had been dining too well, and, hailing a taxi, he crawled gingerly inside, after falteringly giving the driver his destination.

It happened that the opposite door had been left unlatched by the previous fare, and stumbling against it, the inebriated one fell outside again. He picked himself up with great difficulty, and accosted the driver.

"Thatsh pretty quick work", he said. "How mush do I owe you"?

—Tit-Bits.

You can't dodge puzzles. If you don't care for cross-words, there are the parking ordinances.

—Key West Citizen.

Lady Astor—"When two people of different nationalities marry, the woman usually gets her own way."

There are three superfluous words in this sentence, see if you can find them. —Judge.

The Long Kind—"Papa", said the small son, "What do they mean by college-bred? Is it different from any other kind of bread"?

"My son", said the father, "it is a four-year's loaf".

—Evansville Crescent.



## County Society Reports

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The monthly meeting of the Atlantic County Medical Society, held on the evening of March 13, was called to order by Dr. D. Ward Scanlan, president. Following the reports of the various committees, Mr. Skean, publicity director of the Atlantic City Chamber of Commerce, outlined the activities of that organization in connection with the forthcoming annual session of the American Medical Association, which will be held in Atlantic City, May 25 to 29 inclusive. The publicity bureau is obviously exerting every possible effort on its own behalf and, in addition, is splendidly coöperating with the A. M. A. Committee on Local Arrangements.

The Scientific Program was opened by Dr. Frederick H. Leavitt of Philadelphia, the subject of his discussion being "Conduct Disorders in Children".

In an appropriate preamble, Dr. Leavitt read a very lucid newspaper article depicting the far-reaching and vicious development in atrocious deeds perpetrated by individuals in different parts of the country. As Dr. Leavitt's paper will be reprinted in full no further mention will be made of his splendid and broad presentation of this subject.

The above mentioned paper was discussed by Dr. Chas. W. Burr, professor of mental diseases at the University of Pennsylvania. Dr. Burr's dissertation on this subject was interspersed with pithy expressions and phrases which created a most decided impression on his attitude toward Conduct Disorders in Children.

Dr. Burr emphatically stated that the breeding of these wayward types is due to the attitude of a certain class of parents who eventually bring into the world these potential, moral and intellectual weaklings. The extraneous reasons of degeneracy today are lack of training inhibition and self control, accentuated by the flexibility and over indulgence of parents. In illustration, Dr. Burr quoted the case of a young adult who was incarcerated in jail for a governmental offense. This individual had a character quotient of zero in contradistinction to an intelligent quotient of 120 plus. Another cause instrumental in conduct disorders is the incorrect method of training the average boy and girl. Dr. Burr believes that our system of education is based on excessive principles of standardization; that it is a grave error to attempt to mold students into one common shape. Nature constructed them all differently. The genius type must be guided along certain lines. He should be taught to think constructively and not how to be opinionated. Our system of education should not crush out the genius. Those factors over which we have no control are tragedies indeed terrible to contemplate, as viewed in the after-results of encephalitis, that strange inflammation of the brain and adjacent tissues. Many of these sufferers are transformed into moral wrecks which are beyond human aid.

A general discussion followed in which members of other New Jersey Societies participated.

The Scientific program was continued by

Dr. William E. Caldwell, of Sloan's Hospital, New York City.

Dr. Caldwell presented a wealth of material extending for a period from 1919 to the present time, during which time autopsies of all still-births and neonatal deaths were performed, totalling over 600 in number. Over 100 of these babies demonstrated a peculiar inflammatory lung condition which Dr. Caldwell believes to be due to irritation of the amniotic cells, especially if there is an infection in the cervix or vagina, after the membrane has been ruptured.

Relative to birth injuries in breech extractions, he stated that 33% demonstrated a fracture of the spinal column at the fifth and sixth vertebrae. He warned the physicians of the danger of overextension of the head which brings about exaggerated pressure of these vertebrae upon the symphysis pubis. Another series of case presentations included rupture of the tentorium with hemorrhage, usually bilateral, and which occurred in normal deliveries as well as difficult and prolonged labors. An unusual injury following breech delivery was that of torsion of the body and rupture of the capsule of the liver with hemorrhage in the abdomen. The causative factors in producing Erb's Palsy and various paralyses in the legs were also diagrammatically presented.

The address was indeed a masterpiece in prophylactic obstetrics and deserves deep thinking and careful observation in following out the ideas presented, as this vast and comprehensive study is based upon very careful clinical and postmortem studies.

The discussion was opened by Dr. Edwin H. Harvey, who enthusiastically acclaimed this brilliant and unique presentation a masterpiece of complete obstetrics; that the ideas and facts presented could only be the resultant efforts of keen observation and diligent study in the most practical manner possible. In conclusion, Dr. Harvey hoped that the lesson so graphically and sharply featured would be productive in reducing new-born mortality and stimulating the physician to more careful and more profound thinking in the application of the principles evolved by Dr. Caldwell.

A general discussion followed after which a vote of appreciative thanks was tendered by the president, D. W. Scanlan and the members and guests in attendance.

### Program for April Meeting.

The Monthly Meeting, Friday evening, April 17, 1925, at 8:30 p. m., at Hotel Chalfonte.

Physicians, Dentists and Students of Medicine are invited. Telephone Marine 4444.

Dr. John H. Stokes, Professor of Dermatology and Syphilology, University of Pennsylvania. (Formerly of the Mayo Clinic) "Lesions of the Mucous Membranes." (Lantern Slide Demonstration.)

Dr. George Draper, Associate Professor of Medicine, Columbia, University, New York City. "Observation on the Relation of Human Constitution to Disease." (Lantern Slide Demonstration.)

D. Ward Scanlan, President.  
Edward F. Uzzell, Secretary.

### Atlantic City Hospital Staff.

Joseph H. Marcus, M.D., Reporter.

The February meeting of the Atlantic City

Hospital was held on the evening of the twentieth, at the Hotel Breakers. The meeting was called to order by Dr. William C. Westcott, president of the staff. Following the reports of various committees there was transaction of the usual business procedures.

The Scientific Program was opened by Dr. Joseph Poland with his report of the obstetric service from September to December, inclusive, 1925. Among the data presented, the following was of special interest: Total deliveries, 75; white patients, 28; colored, 47; normal deliveries, 68. There were 2 breech extractions, 1 forceps, 1 face presentation, 3 still-births, 1 abnormality typical of the open type of Spina Bifida. There were 3 caesarian sections, all of which recovered. The sections were performed on account of the existence of contracted pelvis, eclampsia, and cholecystitis.

Dr. Poland presented the following case embodying elements of more than usual interest. A female, 37 years of age, pregnant, and mother of 7 children all living and well, was brought to the hospital from Pleasantville. Three weeks before admission, the patient commenced to vomit, which, after due time, was controlled by the family physician. Two days prior to admission she commenced to vomit again and was admitted to the Medical Service, under the direction of Drs. Chew and Andrews. All efforts to control the vomiting proved unavailing, and diagnosis of partial intestinal obstruction was made. Upon physical examination, the salient features were complete rigidity of the entire abdomen and vomiting. A caesarian section was advised and Dr. Walt P. Conaway performed the operation, delivering a normal baby. At the time of operation cholecystitis with gall-stones was demonstrated but the operation for gall-stones was not performed on account of additional features of shock. The symptoms had at no time pointed to involvement of the gall-bladder. Patient promised to return for a secondary operation.

Dr. D. Ward Scanlan continued the Scientific Program of the Medical Service, with Dr. Harold Davidson as associate. In presenting his program, Dr. Scanlan felt that it would be of greater interest to report certain cases than to give a chronicle of statistics. The service included November and December, 1924, and January, 1925. He introduced Dr. Dalton, resident physician, who presented the following 3 cases with accompanying radiographs, which were demonstrated by Dr. Westcott.

The first two cases presented by Dr. Dalton typified pneumonia as found in infancy, both of these patients being under 1 year of age. They made uneventful recoveries with the exception of a complicated otitis media which necessitated incision. The third case was of unusual interest. The patient was a 1 months' premature baby presenting as the outstanding feature "intermittent cyanosis", admitted to the hospital when 6 weeks of age. At no time did this baby present an increase in temperature. The history of birth was normal with no obvious source of any infection. With the accompanying cyanosis, the heartbeats decreased both in quantity and in quality and during the height of Cheyne-Stokes respiration, when the cyanosis had reached the highest point of intensity, there would be a cessation of heart action. With the institution

of artificial respiration and other stimulating procedures the cyanosis would gradually lessen and breathing slowly return to normal; the heart activity responding accordingly. Baby died in one of these attacks. At autopsy there were found numerous superficial infarcts in the lungs, spleen, kidneys and liver with minute excrescences on the valve leaflets of the heart. Case diagnosed as malignant endocarditis.

Dr. Westcott demonstrated x-ray findings in this baby and emphasized the unusual diaphragmatic action while under the fluoroscope.

Dr. Bew, in discussing pneumonia in infancy, urged a freer use of x-rays as being of extreme value in checking up symptoms in doubtful cases as well as a splendid measure in correlating the physical findings. He also urged a more or less constant observation for prompt recognition and treatment of complications.

Dr. Marcus cited a large series of pneumonia cases presented by Dr. Moffett, of Lenox Hospital, New York, in which he demonstrated the greater incidence of lobar pneumonia over bronchopneumonia in infancy and childhood. He further quoted the advisability of early and continuous stimulation until passing of the crisis.

Dr. Scanlan resumed the report of the Medical Service with an outline of the following fatal cases supplemented with autopsy reports.

Case 193. Male, aged 68 years. Diagnosis, chronic nephritis and myocarditis; cerebral hemorrhage. About 8 months ago, patient had an attack of kidney disease with dyspnea and edema. Present attack started several days prior to admission. The early history included the usual children's diseases, chronic tonsillitis and rheumatic fever. Complete blood and urinary laboratory procedures were done. Hyaline casts and blood were demonstrated in the urine. At autopsy, the findings confirmed the renal and cardiac diagnoses; cerebral edema was the causative factor in producing a hemiplegia that was present on admission.

Case 4424. Male, aged 40, died on the day of admission, with a diagnosis of aortic aneurysm. This case was sent in from Pine Rest Sanatorium where x-ray studies disclosed the existence of the above-mentioned condition. Among the outstanding features disclosed at autopsy, were aneurysm of the transverse and descending aorta and a chronic suppurative appendicitis with localized adhesions. The aneurysm was adherent to the third, fourth, fifth, and sixth dorsal vertebrae and by constant pressure had eroded a great deal of bone. At the time of autopsy, Dr. Bew stated that this type of bony erosion caused this patient an extreme amount of pain, entailing marked suffering. Dr. Scanlan felt that the pathology of the appendix was also a causative factor in producing marked abdominal symptoms.

Case 3827. Male, 76 years of age, white, died 5 days after admission. Diagnosis on admission was acute lobar pneumonia. The urine examination disclosed hyaline casts and, at autopsy, the predominant pathology was a massive lobar pneumonia of the left side with similar pathology in the middle lobe on the right lung; the kidneys were of the chronic interstitial type. An interesting feature was a



cystic hepatitis disclosing 2 large cysts under the capsule of Glisson. The hepatic cysts did not evidence themselves through symptomatology at any time.

Case 4027. A young adult female, married, died 1 day after admittance. Diagnosis, diabetes mellitus. This patient was extremely adept in the dietary procedures, relative to her condition, as she had been treated in various other institutions. The laboratory findings disclosed urine sugar 2.2%; blood sugar 400 mg. Due to the existing conditions, a limited autopsy was performed which demonstrated a chronic pancreatitis with adhesions.

Case 3839. Male, aged 69 years, admitted with extensive second degree burns. Died 2 days after admission. Autopsy disclosed a chronic myocardial degeneration.

Case 4163. Adult male, admitted with diagnosis of empyema of the right pleural cavity. The history of the condition dated back several days before admission and there was also a history of asthma for the past 22 years. The chest was aspirated and a partially cloudy fluid obtained, culture was negative for T. B. and other organisms. A guinea-pig was inoculated with a portion of the fluid and following the death of the guinea-pig a smear was made which revealed numerous pneumococci. At autopsy, the findings were gangrene of the right lung with atelectasis, in addition to a quantity of foul-smelling fluid in the right chest.

Dr. Scanlan's remarks relative to this case, embodied the belief that this lung infection was the direct cause of the asthma and due to the breaking down of the existant pathology, produced death. This is the second case of chronic asthma associated with empyema that Dr. Scanlan had seen.

Case 4024. Male white, 40 years of age, died on the day of admission. The salient features of this case were delirium, chronic nephritis and acute pneumonia, with a history of chronic alcoholism. Autopsy confirmed this diagnosis, and Dr. Scanlan held that this patient might have survived pneumonia had it not been for the existence of nephritis of alcoholic origin.

Case 352. Female, 60 years old, white, admitted January 27. This patient had a severe secondary anemia, the primary factor being a large uterine fibroid. Dr. Scanlan exhibited this case as an illustration of the unusual anemia following uterine fibroids of long duration.

A case of quite unusual interest was that of a private patient of Dr. Scanlan's. Boy, aged 8 years, white, whose chief complaint was "pain in the abdomen". The past history included symptoms that were spoken of by the mother, as bad stomach trouble which dated back several years. No masses or tenderness in the abdomen. Blood examination was negative. Blood Wassermann negative. Examination of the stools was negative with the exception of the presence of occult blood. A complete gastro-intestinal x-ray study was made, and confirmed the clinical diagnosis of a chronic adhesive appendicitis with pylorospasm. Dr. Scanlan feels that there is positive indication for appendectomy with release of the adhesions. Dr. Westcott demonstrated a series of x-ray plates of this patient.

Dr. Bew lauded the activities of Drs. Scan-

lan and Davidson during their administration of the Medical Service.

Dr. Senseman voiced the sentiments expressed by Dr. Bew, and emphasized the excellent work and the enthusiasm exemplified by Drs. Scanlan and Davidson in the splendid care that was given these ward patients, and highly complimented them upon the large percentage of autopsies obtained. He expressed the hope that the efforts of the various surgical services would be successful in either equalling or emulating the praise-worthy work performed by the Medical Service.

#### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The Bergen County Medical Society held its regular monthly meeting, Tuesday evening, March 10, at the Hackensack Hospital. In the absence of Dr. Trossbach, Dr. Sullivan presided. Dr. Bell, Chairman of the County Welfare Committee, reported that, at the request of the State Society Welfare Committee, he had telegraphed to Senator Mackay urging support of Senate Bill No. 132 and had received a telegram in reply stating that the Senator was supporting the Bill. Dr. Bell further reported that as the Bill is in the Judiciary Committee of the Assembly, he with other members of the County Society, had gone to Trenton to urge Mr. Chandless to report the Bill to the Assembly so that it might be voted upon, and failing to secure this action on the part of Mr. Chandless, arrangements had been made to have an Assemblyman from Essex County present a motion designed to take this bill away from the Judiciary Committee so that it might be acted upon by the Assembly.

Dr. Bell also reported for the Public Health Committee that several cases of typhoid fever had developed in Bergen County, and there followed some discussion by members of the Society as to necessity for an investigation of the Hackensack water supply.

Dr. Horowitz, of Morsemere, was elected to membership.

Dr. Rolfe Floyd, Junior Attending Physician and Pathologist to Roosevelt Hospital, New York City, was presented as the speaker of the evening and gave an interesting address on "Uremia". (This paper will be published in full in the Journal.)

#### Ridgewood Medical Society.

Harry S. Willard, M.D., Reporter.

The regular monthly meeting of the Ridgewood Medical Society was held Wednesday evening, March 18, at the Howard House in Ramsey, the Ramsey members of the Society being the hosts of the occasion.

There was a large attendance of the Society members present and a number of medical men from Paterson and vicinity.

The usual scientific session was dispensed with and the evening given to a general social get-together.

Miss Marie Miller, the noted harpist, rendered several selections upon the harp during the course of the dinner and was encored again and again for the beautiful music she elicited from the instrument.

At the close of the dinner, Mr. Jacques



Romano, a noted psycho-analyst and medical chemist, gave an instructive talk on psycho-analysis and auto-suggestion and then proved his theories in the most astonishing manner by a series of auto-suggestive demonstrations and tricks which were very cleverly executed and from which unusual enjoyment was had by the doctors.

The meeting was voted by all to be one of the most enjoyable that the Society has ever had, and adjournment was not taken until the wee small hours of morn.

#### Camden City Medical Society.

Henry B. Decker, M.D., Secretary.

The monthly meeting of the Camden City Medical Society was held on March 3. The subject of gonorrhea was taken up by Drs. Baker, Bentley, Sharp and Schrack, Dr. Lippincott opened the discussion.

The subject was well covered in the papers. Dr. Lippincott discussed the papers in his usual humorous manner, citing cases from his practice to illustrate his points. He advanced the thought that the frequency of chronic gonorrhea and its complications might be due to the physician who treats acute gonorrhea not having enough interest in the condition and the patient to see that proper treatment is carried out.

The papers were discussed generally, Dr. Buzby mentioning the joint complications and Dr. Lee speaking about gonorrhea in the female.

#### ESSEX COUNTY.

Alfred Stahl, M.D., F.A.C.S., Reporter.

The Essex County Medical Society merged its March meeting with the special session of the Academy of Medicine in honor of its most distinguished member.

The anniversary meeting of the Academy of Medicine of Northern New Jersey was held in the Academy Auditorium in Newark, Wednesday evening, March 18, 1925. The anniversary celebration was in honor of Dr. Edward J. Ill, the moving spirit in the founding of the Academy of Medicine, and upon his completion of 50 years in the practice of medicine.

Dr. Howard Kelly, of Baltimore, a classmate of Dr. Ill, delivered the principle address. Dr. Kelly told of Dr. Ill's many contributions to medical publications. He declared that Dr. Ill's early writing forecast a successful career. His keen scientific and analytic mind being discernable in all of his papers. In the changes and advancement of medical science, Dr. Ill had no mean part. His plastic operations on the female genitalia are classical. Dr. Ill has been an ardent student of both malignant and benign tumors. Dr. Kelly declared he was a man who gets an idea and never lets go.

Dr. Henry J. F. Wallhauser, president of the Academy, opened the program with a message from its members wishing Dr. Ill, who was its first president and its benefactor, continued success in the medical field and a long life. Dr. Wallhauser declared Dr. Ill was an inspiration to those who knew him, and has been a guide and wise councillor to many young and also older physicians.

Dr. Lucius F. Donohoe, president of the New Jersey State Medical Society, extended the congratulations of the State Society, and referred to Dr. Ill as "The Grand Old Man" of medicine.

Dr. George Kosmak, of the Lying-in Hospital, New York City, brought the greetings from the New York physicians. Former Health Commissioner Darlington, of New York, one time first assistant of Dr. Ill, asserted that Dr. Ill was always ahead of the times, pointing out that the recently adopted method of giving hot water after ether was inaugurated more than a score of years ago by Dr. Ill.

The felicitations from the Essex County Society were conveyed to Dr. Ill by C. Rutherford O'Crowley, president of that Society.

Dr. John F. Hagerty, in behalf of the Academy, presented to Dr. Ill, engrossed resolutions of praise.

Dr. Ill responded in his usual modest way, saying: "I really didn't know I was such a good man. I am glad to know about it. To practice medicine 50 years is a task to look forward to and it is a pleasant one to have finished. Fifty years ago medicine had just begun to be a scientific study."

It must have been pleasing to Dr. Ill to see the auditorium filled to overflowing, paying tribute to his preëminence in medicine, and to his character as a man.

A beautiful painting by Michael Angelo was presented to the Academy by Dr. J. Ackerman Coles, of Scotch Plains, in memory of his father, Dr. J. Abraham Coles.

#### Eye, Ear, Nose and Throat Section.

The Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, held its regular monthly meeting on March 9. The paper of the evening was read by S. MacCuen Smith, M.D., Professor of Otolaryngology, Jefferson Medical College. Title: "Acute Aural Diseases". The absolute necessity of early myringotomy as soon as bulging of the tympanic membrane takes place was especially stressed by the speaker. The incision should be made through the bulging part wherever it may be. It is best made in the form of the letter J; the hook being around the tip of the manubrium. This facilitates better drainage than the straight incision.

#### GLOUCESTER COUNTY.

Henry B. Diverty, M.D., Reporter.

The Gloucester County Medical Society met on the evening of March 19, at the Hotel Pitman, Pitman, New Jersey, with 19 members present. The invited guests were Dr. Thomas M. Kain, of Camden, and Professor Thomas McCrae, of Jefferson Medical College, Philadelphia.

Dr. McCrae delivered a very interesting and instructive address on "Heart Disease".

The County Society is holding its meetings monthly this year, instead of bimonthly as heretofore, and this change has met with the hearty approval of the Society members.

As usual, this monthly gathering terminated in a delightful luncheon party.

## HUDSON COUNTY.

Wm. Freile, M.D., F.A.C.S., Reporter.

The stated monthly meeting of the Hudson County Medical Society took place on March 3, 1925, at the Nurses' Auditorium, Jersey City Hospital, President Luippold in the chair.

The revised By-laws and Constitution, as read at the previous meeting, were voted on and adopted.

Dr. Londrigan reported on the progress the "Doctors' Bill" in Trenton was making at that time. He also reported that the Hudson County Medical dinner showed a profit of \$166.35 over all expenses paid.

Dr. Carl Gressinger, of West New York, was proposed for membership.

Dr. Haven Emerson, Professor of Public Health of Columbia College, and former Health Commissioner of New York City, spoke on "Periodic Health Examination". He referred to the life expectancy in Europe in the time of Columbus as 18 years; this rose during Napoleon's reign to 33; in 1842 it was 44; and in America, in 1925, has reached 58. He mentioned that in a study of the cause of poverty, the main one was found to be disease, and that the most prevalent was tuberculosis. The welfare societies for this dread and wide-spread disease had reached tremendous magnitude in some 20 years. Two decades ago examination showed that 70% of persons had T. B., many of them in its worst forms, and these cases were sure to die. Now, of those who present themselves, 70% have not got it.

A Committee of the A. M. A., two years ago held a meeting, the object of which was to decide what type of examination would meet the necessities, and Dr. Emerson devised the first form. Then the National Tuberculosis and Child's Hygiene Association came to this Committee, because they thought well of the idea and wanted to combine and help publish it. To illustrate the revelations which systematic and thorough examinations produced, he cited that at the Queen's County Medical Society about 500 doctors were gone over and 91 were found to have serious and unsuspected pathology, such as diabetes, cardiac dilation, hypertension, nephritis, etc.

Dr. Joseph Schapiro, of West New York, opened the discussion by saying that the public interest in health examinations was on the increase; that the T. B. clinics were being utilized by many people, not so much to get something for nothing, as to get something which they are not so familiar with in their own private circumstances. He advocated examinations of persons particularly from 40 on, without waiting for symptoms of disturbance. Life insurance investigation often called things, unsuspected, to the applicant's attention.

Dr. A. E. Jaffin urged the necessity for careful and thorough examination; the importance of discovering the cause of symptoms; the fact that any patient will appreciate a complete going over and not object to the extra charge therefor. If the members start this periodic examination among themselves it will stimulate them more than the public.

Dr. F. J. Quigley, Union City, believed that the time was ripe to institute periodic health examinations in this county and State; that

a great opportunity exists to increase the prestige of the profession, but that the matter should be approached in good fashion, or harm might result. He had thought of instituting short courses with the county members as subjects, the examinations to follow a regular routine. He asked Dr. Emerson for suggestions.

Dr. J. H. Rosecrans, of Hoboken, recalled that the important and extensive work now being carried on at Snake Hill, had its inception from Dr. Gordon K. Dickinson. Dr. Rosecrans stressed the importance of the little things of life and quoted incidents in the careers of Oliver Wendell Holmes, Weir Mitchell and the Biblical leper King to emphasize his point. He hoped that we might get the psychology of life.

Dr. B. S. Pollak, Laurel Hill, voiced his keen interest in this subject. The N. J. Tuberculosis League, of which he is president, has been trying to promulgate this thought and took some of the credit because of the work which has accrued. He had visited several of the medical societies. Essex County was at present addressing itself to this important topic. From his experience in T. B. work, it behooved one to take the practical view. It could be established that there was nothing unethical about the proposition; the profession itself should lead the way, and he asked Dr. Emerson to state how the Hudson County Medical Society could be made a force in this direction of benevolent thought.

Dr. Berlin asked the average age of persons who came for periodic examinations, and if many of them were of the type who feared infirmity; how many were over 40 and what percentage came for the second and third examinations?

Dr. Joseph Londrigan felt that the most important factor was the education of the public, and he wondered just how it could be done properly. He asked as to the usefulness of the Life Extension Institute, inasmuch as he recalled some instances where clean bills of health had been given, whereas at the time of examination, definite evidence of disease was found.

Dr. Emerson, closing, was of the opinion that rejected applicants for insurance were fortunate, because they fell into the hands of physicians, the companies taking no activity after the rejection. In regard to the Life Extension Institute, he considered their system to be complete and thorough, and that on the whole they were doing good work; perhaps some fallacies occurred, the same as in the hands of every physician. He stated that people are getting health examinations at all ages, although it is less common between 15 and 45. He advocated twice yearly investigation for ages between 2 and 5; between 6 and 16, once yearly unless some severe infection should leave its impress; between 16 and 35, once every 2 years; after 35 once a year, unless in cases over or under weight, high blood pressure, etc. He considered it the best service that any one could buy. One way to help was to get men of recognized reputation in the specialties, and get them to talk and elaborate on the earliest symptoms of the conditions which they particularly treat. Start the movement on themselves; examine 100 members (the result will be startling); extend the



idea to wives and children; you will soon make an impression on the community; a manual, showing methods of procedure, containing a special chapter dealing with the organization of county societies will soon be published by the A. M. A. Everything (except scales) necessary for the examination can be carried in a kit bag. Get half a dozen men chiefly concerned with internal medical diagnosis, well equipped medical examiners, assign each to 2 examinations an evening and see what pathologies you will find; thus, often, early T. B. and early nervous symptoms of syphilis will be discovered and dealt with, saving health and much otherwise lost time.

### MERCER COUNTY.

A. Dunbar Hutchinson, M.D., Reporter.

The following is a report of the proceedings of the Mercer County Medical Society, held Mar. 11, 1925. The minutes of the preceding meeting were approved. The applications of Drs. Paul Traub, and C. C. Chianese read and referred to Committee. Dr. Traub applies for transfer from Burlington County Society.

The president announced a round table discussion of several of the proposed activities of the Department of Health of the State: (1) The extension of Rural State Laboratory facilities. (2) The extension of Child Hygiene Department. (3) The Continued Movement in Favor of Strict Legislation Surrounding the Different "Cults", now Seeking Protective Measures.

A very interesting discussion took place on the above subjects.

Dr. Wm. G. Schauffler gave a report on the reorganization of Princeton Hospital, and appealed for the support of the physicians and surgeons of the State.

### MIDDLESEX COUNTY.

Edward F. Klein, M. D., Reporter

The regular quarterly meeting of the Middlesex County Medical Society was held at the home of Dr. Alfred L. Ellis, Metuchen, Mar. 18, 1925, with the President, Dr. J. F. Weber in the chair.

A social committee was appointed to arrange for a tri-county meeting, Middlesex joining with Mercer and Monmouth, at some future time, preferably in September or October.

Dr. R. L. McKiernan, of New Brunswick, was named as Delegate to the State Medical Society, in place of Dr. Lippincott.

Applications for membership were received from Drs. Joseph Wantoch, of Cartaret, and S. C. Berkow, of Perth Amboy.

Professor Roger Dennett, of the New York Post-Graduate Medical School, gave a very interesting lecture on "Acidosis", discussing in a practical way the acute and recurrent attacks of this condition and the appropriate treatment of each. The lecture was splendidly received and a hearty vote of thanks was tendered the speaker.

At the conclusion of the scientific program, Dr. Ellis entertained the Society and served refreshments of a delectable character.

### MONMOUTH COUNTY.

Stanley Nichols, M.D., Reporter.

The regular monthly meeting of the Monmouth County Medical Society was held in conjunction with the Asbury Park Medical Association on the evening of February 25, at the Marlborough Hotel, Asbury Park, with an attendance of 35 members, presided over by Dr. Herman.

Dr. Bradley Coley, of the Memorial Hospital, New York, read a very instructive paper entitled "Some Remarks on the Treatment of Tumors by Physical Agents". Dr. Coley advised that carcinoma of the cervix should be treated by radium alone; that in carcinoma of the stomach and upper intestinal tract, radium should not be used; that in carcinoma of the breast, radical surgery plus radium is indicated; and that in lymphosarcoma, Hodgkin's disease, leukemia and angiomas, radium alone is the treatment of choice. The lecture was illustrated by lantern slides showing bone sarcomas and other lesions. One case exhibited was a giant celled sarcoma of the bone (endothelioma) in a man aged 50, that was apparently cured at the end of 9 months' treatment with Coley's toxins and radium. The bony growth had been about the size of a lemon, situated just above the left ear, and there remained only a scarred area. Incidentally, the hearing had been restored. The toxins so widely employed by his father consist of killed cultures of the *Bacillus prodigiosus* and *erysipelatus* in graduated doses.

Dr. Fisher, of Asbury Park, exhibited a case of osteosarcoma of the left antrum, in a woman aged 48, treated by surgical eradication of the affected area followed by radium. A small recurrence had been later treated by radium, with recession of the condition for about 8 months, at the end of which time another small recurrence required further applications.

Dr. Leonard, of Asbury Park, then read a comprehensive paper on "Melanosarcoma" and exhibited a very unusual case: A woman aged 25 had a peculiar tumor at the angle of the left jaw, which first resembled a glandular mass and was treated by Roentgen rays. There was recurrence after 3 years and this time it was removed surgically and then given postoperative applications of Roentgen rays, radium and endothermy, with apparently good results.

After a general discussion of the subject, a buffet lunch was served, and the society then adjourned.

### MORRIS COUNTY.

Marcus A. Curry, M.D., Reporter.

The regular quarterly meeting of the Morris County Medical Society was held at the Elks' Home in Dover, on the evening of Wednesday, March 11; President McMurtrie presiding over an assemblage of 35, including as guests Drs. Bradford J. Murphy, R. J. Harquail and Antonio Hubert from the State Hospital at Greystone Park. In the absence of Dr. Kice, on a sojourn in Florida, Dr. Costello kindly and efficiently performed the functions of secretary. Treasurer Reed rendered a report that showed the society to be to some extent financially plethoric.



A communication was read from the Secretary of the Welfare Committee of the State Medical Society, which was accompanied by printed lists of the State legislators, enlisting the efforts of the members of the society to further Senate 132, designed to prevent the misuse of the title "Doctor".

A communication also was read from the management of the Shongum Sanatorium inviting the society to hold its next meeting at that institution.

A communication from Dr. Augustus S. Knight, of Gladstone, Medical Director of the Metropolitan Life Insurance Company, expressed his pleasure and appreciation over having been elected to honorary membership in the society.

Dr. W. E. Derry, of Dover, and Dr. Byron D. Sherman, of Mendham, were unanimously elected as members of the society. Two applications for membership were received and referred to the proper committee, to be voted on at next meeting.

A nominating committee to present at the next meeting a roster of officers for the ensuing year—without abridging the right of any member to present other names—was unanimously elected; the personnel of the committee being Drs. Clifford Mills, Ellery N. Peck and Frederick W. Flagge.

The feature of the evening, which was long looked forward to with much interest, was a symposium on "Indigestion", by the members of the society.

Dr. Clifford Mills' phase of the subject was "Organic Diseases of the Stomach and Duodenum" which he illuminated and illustrated by a series of skiagrams, and for the purpose of discussion divided into acute and chronic gastric catarrh, gastric ulcer and cancer. Dr. Mills' presentation reflected expert aptitude with the subject which he handled with painstaking detail.

Dr. George H. Foster read a paper on "Indigestion Due to Constipation and Stasis". Dr. Henry Rubin presented a paper on "Chronic Indigestion Due to Organic Abdominal Diseases, Outside of the Stomach and Duodenum". Dr. Horn's phase was "Functional Aspects of Chronic Indigestion, Due to Ailments Producing Motor Disturbances". Dr. Malcolm Smith read a paper on the "Relation of Indigestion to Life Insurance", showing how applicants for insurance are rated medically and actuarially, where there is history of indigestion, and the lapse of time after which it is treated as negligible.

The papers were discussed freely, Drs. Lathrope, Glazebrook and Reed leading in extent. The symposium was declared to be composed of 5 exceedingly good papers and the contributors received a rising vote of thanks and appreciation for their efforts brought to such interesting results.

It was voted to hold a special meeting of the society to afford Dr. Abell opportunity to show moving pictures of Motor Phenomena of the Stomach and Pulmonary Tuberculosis; the date to be fixed by the executive committee and the members to be duly notified.

The next regular meeting will be held May 19 at Shongum Sanatorium (Morris County Tuberculosis Institution), the speaker of the

day to be Dr. Kraus, editor of American Review of Tuberculosis.

At eleven o'clock the members and guests vacated the lodge meeting rooms of the Home and adjourned to the dining room where a tasty and abundant supper was served amid the affable and welcome atmosphere of the Elks' Home.

## PASSAIC COUNTY.

Louis G. Shapiro, M.D., Reporter.

The regular meeting of the Passaic County Medical Society was held on Mar. 12, in the Chamber of Commerce Rooms, Paterson, 25 members being present. Dr. Thomas A. Dingman presided.

Dr. Howard Lilienthal, of New York City gave a most interesting discussion on "Some Medical Aspects of Thoracic Surgery", with lantern slide illustrations.

The principles underlying thoracic surgery are quite different from those involved in abdominal surgery. The outstanding features are as follows: Before entering a virgin pleura, one that has not been infected, it is important to remember that a thorax that has been opened behaves as a single cavity. With an opening on the side, the pressure on the opposite side becomes less negative. The mediastinum is loose and is sucked toward the unopened side on inspiration and forced from it on expiration. The size of an opening in the chest wall is of great importance. At one time, it was thought that an opening into both pleural cavities was incompatible with life. Graham and Bell proved that a small opening in both pleural cavities is not fatal, whereas a single large opening into one side may be a quick or slow cause of death, depending upon the patient's vital capacity before operation. The important thing to do, is to plug the opening, if small, with gauze or lung; and if large, to use a pressure apparatus of some kind. Negative pressure in the pleura causes falling way of lung from the chest wall and spreads infection throughout the chest. Yet, if made under proper precautions, a wide opening of the chest is not as shocking, nor as dangerous, as an extensive abdominal opening. The patient may frequently be allowed out of bed the next day.

Hemorrhage from the lung encountered during operation is difficult to stop by packing. The blood is diverted into a bronchus, causing flooding of the bronchi, hemothysis and death. The formation of a tense pneumothorax is another operative complication. The cause is a valvular opening to the outside or into a bronchus. Relief is readily given with trocar and cannula.

Cerebral embolism occurs more frequently in chest operations than in all other surgery combined, because cerebral embolism from the systemic circulation is possible only with a patent foramen ovale. The most dangerous and shocking variety is air embolism of the brain. This accident is what was formerly called pleural shock. Plural shock as such, has never been produced in animals and probably does not exist. Cerebral air embolism occurs when a puncture or opening is made into indurated lung tissue, opening into a pulmonary vein.

The vein is held wide open by the indurated tissue. On inspiration, air is sucked directly into the left auricle and is quickly carried to the brain. In aspirating or puncturing the chest, the patient should always be lying down. Air entering the heart rises directly into the aorta, the carotids and brain with the patient in the upright position. If the accident occurs, lower the patient. Do not do artificial respiration because more air will be aspirated into the circulation. Try cardiac massage and adrenalin. The accident usually occurs in old cases. In the milder cases, beads of air have been seen in the retinal arteries. In these cases, there is temporary blindness. Not all cases die.

Bacterial or septic embolism of the brain is another accident sometimes encountered. The condition is hopeless.

Dr. Lilienthal then turned to suppuration of the parenchyma of the lung. This is brought about by aspiration or else is pyemic in the sense that the infection is brought by the blood stream. In the early stage, the patient has fever and may appear dusky. There are few symptoms and the focus is difficult to find by physical signs. If suspected, it is readily demonstrated early by x-rays. These cases should be operated upon immediately. If not, the infection breaks through into a bronchus and floods the lung.

Malignant tumors of the lung are of 2 types; those arising from a bronchus, and parenchymal tumors. Malignant growths of a bronchus are characterized by cough and bloody expectoration. They can be identified early by bronchoscopy but are not demonstrable by x-rays until the bronchus has become plugged. This is always promptly accompanied by suppuration, which adds greatly to the danger of operation. Very few satisfactory operative results have been obtained; 6 good cases are on record. The parenchymal tumor looks like a metastatic lesion in the x-ray picture. This ought to give excellent results if operated on early and should not be as dangerous as a breast operation. But no human has been afforded the opportunity of being operated on early enough. The first symptom is a dry cough, at times accompanied with streaks of blood. Bronchoscopy should be done early. This is a much more frequent disease than is generally known. Suppuration always follows. The speaker has never had an early case nor cured any.

In suppurative bronchiectasis, lobectomy is a dangerous operation because of the enfeebled state of the patient. Neither is chest collapse a good operation, in these cases. In lung suppuration with stinking fluid in the bronchi, drainage should be provided in some way and air should be made to enter where pus was. The problem is drainage and aëration.

In far advanced pulmonary tuberculosis, where there is no possibility of the lung expanding again, surgical intervention is helpful if the opposite lung lesion is quiescent. The purpose to be attained is rest for the lung, as this has proven to be the most effective treatment for tuberculosis anywhere in the body. This is best provided by an extrapleural thoracoplastic operation which fixes the ribs and prevents their motion. If the phrenic nerve is pulled out, putting the diaphragm at

rest as well, then excellent rest is provided. It matters not what the nature of the lesion is, fluid induration or cavities, a beneficial effect is obtained. Portions of all the ribs from the first to the eleventh inclusive are resected. The ribs fall like a Venetian blind. The cut ends eventually find each other and unite, giving a fixed wall. These cases stand the operation well. The death rate, even in inexperienced hands, is only 25-30%.

Dr. Lilienthal spoke for a moment on removal of the cervical sympathetic for relief of the pain of angina pectoris. Complete relief is afforded, without, however, affecting the course of the disease. In spite of the removal of pain, these patients still have warning by various sensations as to when they are overdoing. The operation can be done without trouble. It is followed by enophthalmos and contraction of the pupil on the operated side. Occasionally, pain in the face and arm follows, but this is probably the result of handling other nerves.

Dr. John C. McCoy discussed Dr. Lilienthal's excellent presentation.

A rising vote of thanks was given the speaker.

## Communications.

### SPECIAL ATTENTION OF WOMEN PHYSICIANS.

The women physicians attending the A. M. A. Convention at Atlantic City in May, will have their headquarters at the Hotel Marlborough-Blenheim.

On Wednesday, May 27, they will have a banquet at the Ambassador, at \$5.00 per plate. Subscriptions, accompanied by check, should be received by Dr. Clara K. Bartlett, 4301 Atlantic Avenue, Atlantic City, no later than May 25, 1925.

### THE AMERICAN BOARD OF OTOLARYNGOLOGY.

The American Board of Otolaryngology will hold its first examination during the meeting of the American Medical Association in Atlantic City, May 25 to 28.

According to the rules of the Board, applicants are divided into 3 classes:

Class I. Those who have practiced Otolaryngology 10 years or more.

Class II. Those who have practiced Otolaryngology 5 years and less than 10 years.

Class III. Those who have practiced Otolaryngology less than 5 years.

The type of examination is different for each class.

The Secretary, Dr. H. W. Loeb, announces that thus far over 300 applications have been made.

### NEW YORK POLYCLINIC GIVES TESTIMONIAL DINNER TO DR. K. WINFIELD NEY.

The staff of the New York Polyclinic Medical School and Hospital, the pioneer post-graduate medical organization in America, on



March 7, at the Hotel Astor, gave a brilliant testimonial dinner to Dr. K. Winfield Ney, Dean and Professor of Neuro-Surgery. The dinner was given to Dr. Ney in appreciation of his services in the reorganization of the institution, and was attended by the Trustees and 125 members of the teaching staff.

During the war, postgraduate teaching at Polyclinic was abandoned, its staff being greatly depleted by many of its members assuming military service. The Government took over the institution for the treatment of wounded soldiers, and because of lack of hospitalization facilities was unable to relinquish the institution until 1922, at which time it was returned to Dr. John A. Wyeth, its original founder. At this time Dr. Wyeth was advanced in years and he died before effecting a satisfactory reorganization. Without his leadership, the institution for the next 2 years passed through a rather uncertain period during which it made but little progress. In the summer of 1924, Dr. Ney was placed in charge of Polyclinic and in a comparatively short time has succeeded in establishing a highly effectual postgraduate teaching organization. The institution is now running full capacity and plans are being made to more than double its facilities.

The New York Polyclinic passed through an experience which was not unlike that of many of the medical men of the country, who gave up their practice and entered the service. After the war, they were greatly discouraged when they returned home and realized that while in the service they had apparently lost their following, but in almost every instance, after a relatively short period they became reestablished and did better than ever before. So with the Polyclinic: after 2 rather discouraging years of reorganization, it has come into its own and is doing more effectual work in postgraduate teaching than at any time in its history.

### THE GORGAS MEMORIAL.

The Gorgas Memorial Institute seems to be accomplishing its initial purpose of uniting laymen and doctors, and instilling into the masses a recognition of the fact that scientific medicine is the only proper authority in health matters.

The Gorgas Memorial Institute evidences a healthy growth from the Atlantic to the Pacific. The value of periodic health examinations is a subject that the foundation is stressing in hundreds of newspaper articles, in public talks and in radio addresses, the country over. Scores of editorials have been written and published by leading newspapers. Without exception they have deep sympathy with the ideals of the organization and heartily endorse it.

A special article written for the Detroit Saturday Night and appearing in the issue of February 14 is pertinent. It reads in part:

"Quacks and quackery in the field of medicine and general health protection will receive a heavy blow when the Gorgas Memorial Institute, recently founded in honor of the great army medical man who showed the world that yellow fever and other pestilences could be

conquered by preventive methods, gets functioning.

"The Institute is not heralding as one of its purposes the counteracting of propaganda such as is spread by Bernard Macfadden and others of his kind who use every opportunity to attack the medical profession, but just so far as its plans, as announced, are successful, it will help to overcome pernicious teachings and ignorance regarding health.

"The Institution will carry out General Gorgas' ideas of the exercise of preventive measures and the use of scientific medicine to check disease and wipe out pestilence. It is estimated that modern ideas of sanitation, coupled with the principle of periodic examinations such as General Gorgas practiced in the United States army during the world war, would mean a saving of \$1,500,000,000 annually. And the decrease in sickness and increase in happiness would be worth as much more.

"On any given day there are 3,000,000 people on the nation's sick list. One million of these are gainfully employed. The daily loss from this one source is staggering."

The County Societies are also proving receptive to the Gorgas Idea. They see in the movement a plan which will aid each member individually. Pronounced commendation is revealed by the Feb. 16 "Bulletin" of the King County Medical Society, Seattle, Washington. In the eyes of Dr. A. C. Crookall, president of the King County Society, the Gorgas Memorial Institute fills a long felt want in the profession, "and the work of the Gorgas Memorial Fund, being based on modern business principles, should be supported by the Society".

"Through the income from a five million dollar fund it is going to make a definite organized effort to 'familiarize' the public with such facts as will enable it to recognize the fallacies of the cultists. A constant fund of proper health information carried to the individual through the pages of his daily newspaper, the columns of the general magazine, by means of moving pictures, lectures and the radio, will direct him to the proper source for medical advice and gradually eliminate these irregulars. The day is not far distant when the physician will keep his patients fit by means of periodic health examinations, by proper hygienic advice, and by the practical application of health and dietary knowledge. Regardless of whether the profession takes an active part in this move, it is coming. The question is only whether we are going to take an active militant stand, or follow our usual *laissez faire* attitude.—Is it not about time that the medical profession tried to take its proper place in our social, commercial, financial and political life?"

Scores of other newspapers in all parts of the country, commented enthusiastically on the movement, and radio talks upon the plan have been broadcast by prominent physicians in several of the large cities.

### PROGRESS MADE IN CONTROL OF CANCER.

Dr. Howard Canning Taylor, of No. 20 West 53rd Street, New York, Professor of Clinical Gynecology at the College of Physicians and



Surgeons, and President of the American Gynecologic Society, was elected President of the American Society for the Control of Cancer at the annual meeting of the Society held in its rooms, 370 Seventh Avenue, New York, March 7, 1925. Dr. Taylor, who has been the Society's Vice-President and Chairman of its Executive Committee, succeeds Dr. Charles A. Powers, deceased. Thomas M. Debevoise was reelected Secretary and Calvert Brewer was again elected Treasurer. Dr. Francis Carter Wood was elected Vice-President.

In the annual report of Dr. George A. Soper, Managing Director, evidence was presented to show that the efforts of the Society to acquaint the public with the early symptoms of cancer in order that those who were affected may receive speedy treatment, had borne fruit throughout the country. The latest report of the Pennsylvania Cancer Commission showed that in Pennsylvania from 1910 to 1923, the average time between the first symptoms and operation in superficial cancer cases had dropped from 18 months to 14.6 months, and that the average time between which a patient consulted a physician and was operated on dropped from 13 months to 4.5 months. Where deep cancers were concerned, the results were even more striking. Twelve years of educational work had cut down the average time between the discovery of the first symptoms of superficial cancer and the first call on the doctor 20% and reduced the interval between the patient's first appearance at the doctor's and the beginning of medical treatment 65% in superficial cancer and 70% in deep-seated cancer. Reports from the 53 State Chairmen of the American Society had shown that in each State cases were coming earlier to physicians and consequently with a better prospect of cure. Specific instances could be quoted of lives saved through the Society's work.

The Society's efforts for the year had included systematic work among the public, members of the medical profession, nurses, dentists and students at medical colleges. The Society's publications had all been revised to contain the latest information. Exhibits had been made at many notable meetings of professional men and women. With reference to clinics, the cornerstone of a permanent institution had been laid in connection with the Medical School of the University of Minnesota, the funds having been provided by Mrs. George Chase Christian, a member of one of the Society's committees. A temporary clinic had been successfully operated at Fall River, Massachusetts, under the direction of Dr. E. P. Truesdale of that city, aided by Dr. Francis Carter Wood. In cooperation with the Connecticut Medical Society, the Connecticut Public Health Association and the Connecticut State Department of Health, the Society had begun a 3 years' campaign in Connecticut during which it will turn to account the experience it has gained elsewhere in cancer control.

The Director's report showed that inquiries for information have greatly increased during the past twelve months. They included letters from physicians of England, Spain, Cuba and Italy who wished information to guide

them in the conduct of campaigns for the control of cancer in their countries.

Dr. Soper recommended that during the coming year work be continued along present lines and broadened in some directions; that "cancer weeks" be generally held; that further efforts be made to enlist the cooperation of dentists, nurses and social workers; that the work undertaken in Connecticut be extended to other States, and that the Pennsylvania Survey be duplicated elsewhere in the country.

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My Bonnie leaned over the gas tank,  
The height of the contents to see,  
He lighted a match to assist him—  
Oh bring back my Bonnie to me.

A dairy maid milked the pensive goat,  
And pouting, paused to mutter,  
"I wish, you brute, you'd turn to milk",  
And the animal turned to butt her.

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#### For Medical Purposes Only.

Two Scotchmen decided to become teetotalers, but MacGregor thought it would be best if they had one bottle of whiskey to put in the cupboard, in case of illness.

After three days Sandy could bear it no longer, and he said: "MacGregor, I'm awfully sick".

"Too late", said MacGregor, "I was sick all day yesterday"!

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Barbital and Unessential Modifications.—The British Medical Journal discusses the multiplicity of barbituric acid hypnotics which English physicians are importuned to prescribe. In America a similar condition exists. The numerous barbital derivatives and mixtures of these with other drugs result from the fact that we have no satisfactory method of evaluating the hypnotics. Apparently the proprietary interests have been taken advantage of this situation, so that the proponents of these barbital derivatives claim various specific advantages for them. British physicians complain of the many market names for substances which have practically the same action, yet with no indication of their derivation from the original and best known drug, barbital. In this country, the Council on Pharmacy and Chemistry provides information concerning the composition and actions of just such products. Until scientific investigators have devised a satisfactory evaluation of this class of hypnotics, it would be much more in keeping with scientific advancement were proprietary houses to refrain from putting out new derivatives, and physicians to limit their prescriptions to the two drugs, barbital and phenobarbital—the only barbital preparations which have been accepted for New and Nonofficial Remedies. The danger to the public of the uses of barbital hypnotics is of growing concern. Barbital, itself, has been the cause of many accidental deaths, and its use is not free from addiction. In England, barbital is included in the poison schedule and further restrictions of its sale is now being considered there. (Jour. A. M. A., Feb. 7, 1925, p. 445).



EDWARD J. ILL, M. D.  
NEWARK, NEW JERSEY





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## ANNIVERSARY MEETING OF THE ACADEMY OF MEDICINE OF NORTHERN NEW JERSEY

Held at Newark, March 18, 1925

**To Celebrate Dr. Edward J. Ill's Completion of Fifty Years in the  
Active Practice of His Profession.**

The meeting, attended by a very large assemblage of lay and professional friends of the honored guest, was called to order by the President, H. J. F. Wallhauser, M.D., who, in a few well-chosen remarks, announced the object of the gathering to be a tribute of respect and esteem for Edward J. Ill, M.D., nestor of the medical profession of New Jersey, upon the occasion of his having completed fifty years of active labor in the practice of medicine.

The program, as issued by the Secretary, E. D. Newman, M.D., provided for an oration upon the scientific work of Dr. Ill, to be delivered by Professor Howard A. Kelly, of the Johns Hopkins University, Baltimore, followed by special congratulatory messages from Essex County Medical Society and the Medical Society of New Jersey, and by the presentation of a handsomely engraved set of "Resolutions" from the Trustees of the Academy.

Preceding this general, public meeting, a Golden Jubilee Dinner had been tendered Dr. Ill by a host of his intimate friends and admirers. The fête was held at the Washington Restaurant and music was furnished by a special orchestra composed entirely of members of the medical profession.

Among those present were:

Doctors F. Albee, F. Amalling, M. Asher, L. W. Bagg, C. F. Baker, R. Baker, S. H. Baldwin, H. C. Barkhorn, C. C. Beling, A. W. Bingham, G. Blackbourne, J. Brown, L. Brown, M. Brown, R. Brown, R. Buerman, P. D. Bunting, C. W. Buvinger, F. F. Carman, A. R. Casilli, A. C. Christian, W. E. Cladek, J. H. Clark, J. A. Coles, H. N. Commando, J. F. Condon, P. Conlon, R. M. Connolly, H. Cook, H. B. Costill, J. L. Courier, W. D. Crecca, M. Danzis, T. Darlington, L. R. Davis, G. K. Dickinson, R. L. Dickinson, R. H. Dieffenbach, H. Disbrow, W. Dodge, L. F. Donohoe, A. T. Dowd, W. P. Eagleton, D. Elliot, A. J. Ellis, L. Ely, J. English, D. A. Eppler, H. B. Epstein, E. W. Erler, E. Euler, Evan Evans, H. M. Ewing, S. Ferris, J. L. Fewsmith,

M. F. Fine, C. R. Fisher, J. I. Fort, B. A. Furman, G. E. Galloway, E. Goeller, W. M. Goodwin, W. Gough, W. F. Grady, W. B. Graves, J. W. Gray, J. S. Green, E. Guinnell, B. Gutman, J. F. Hagerty, F. Hagney, F. T. Hanan, A. S. Harden, H. B. Harris, H. M. Hart, T. W. Harvey, F. D. Haussling, E. Z. Hawkes, E. W. Hedges, M. D. Hedges, L. S. Herndon, F. Hexamer, B. W. Hoagland, E. Holden, G. J. Holmes, P. Hood, F. S. Horsford, P. H. Hosp, M. D. Hughes, Ralph H. Hunt, S. Husserl, C. H. Ill, C. L. Ill, E. A. Ill, E. J. Ill, E. W. Ill, H. Ill, J. R. Irwin, W. B. Johnson, C. J. Kane, W. F. Keim, S. C. Keller, H. A. Kelly, F. J. Kerns, H. B. Kessler, L. G. Kirkman, E. C. Klein, Jr., G. W. Kosmak, D. A. Kraker, J. Levy, S. B. W. Leyenberger, H. W. Long, J. H. Lowery, O. Lowy, M. MacCaulay, E. L. Markthaler, F. L. Martine, H. S. Martland, C. H. Matheke, H. G. McBride, J. C. McCoy, F. McEwen, P. C. Menk, W. D. Minningham, V. Mravlag, D. R. Mischeld, O. B. Mockridge, J. B. Morrison, P. F. Motzenbecker, W. Motzenbecker, W. Mount, R. J. Mullin, H. A. Murray, A. B. Nash, E. D. Newman, B. A. O'Connor, G. P. Olcott, C. O'Neil, G. L. Norton, H. B. Orton, H. S. Palmer, A. Parisi, G. Payne, W. Petry, G. B. Philhower, F. W. Pinneo, A. W. Polak, Polikoff, W. O. Quimby, W. E. Ramsay, J. M. Randolph, H. O. Reik, E. Reissman, R. C. Ribbans, S. E. Robertson, R. H. Rogers, J. H. Rosencrans, C. A. Rosewater, M. Runyon, H. H. Rusby, Saslow, E. Sawyer, R. A. Schaaf, E. Schwartz, F. D. Scudder, R. S. Seibert, W. F. Seidler, E. A. Seidman, M. Seidman, F. Sell, E. S. Sherman, E. Snavely, E. W. Sprague, I. T. Spencer, M. F. Squires, E. Staehlin, E. S. Steiner, A. L. Stillwell, W. S. Stone, H. S. Sutphen, R. D. Swain, M. J. Synnott, H. A. Tarbell, C. E. Teeter, Theo. Teimer, A. Thompson, W. S. Tucker, H. S. Vail, R. H. Van Ness, A. Wallhauser, H. F. Wallhauser, W. S. Washington, A. V. Wendel, E. G. Wherry, H. B. Whitehorn, J. G. Wilson, C. H. Wintch, J. F. Wolfs, J. T. Wrightson, A. C. Zehnder. Rev. J. A. Martin, Justice W. S. Gummere. Messrs. E. S. Astley, C. Bippard, C. H. Bippard, H. L. Bliss, E. S. Colie, O. Dey, E. Dieffenbach, H. Dieffenbach, J. L. Eisle, E. Franzen, A. C. Henseler, C. W. Hummell, Ill, R. H. Kirch, J. Newman, C. O'Malley, E. O'Malley, G. Perrett, G. A. Scheller, R. E. Shorteau, A. Vogt, A. C. Wall, F. Walzinger.

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## THE LIFE AND WORK OF EDWARD J. ILL, M.D.,

Reviewed Upon the Fiftieth Anniversary of His Entrance Upon Practice

HOWARD A. KELLY, M.D.,

Emeritus Professor Gynecology, Johns Hopkins University Medical School,  
Baltimore, Maryland.

I appear tonight as requested by your committee to attempt the impossible, namely, that of rendering a just appreciation of a noble life passed in an heroic devotion to the service of suffering humanity. While I am conscious that my task cannot be perfectly fulfilled, I am yet thankful for the opportunity afforded me, and I trust in some measure to you also, to present a brief recital of some of the activities of a remarkable life, and of drawing from this fresh inspirations to pursue our own tasks in like spirit of faithfulness to the allotted end.

Dr. Ill has passed the three score years and ten of the Psalmist and yet continues to labor among us in full mental and physical vigor. And on this auspicious occasion we meet to celebrate the fiftieth anniversary of his induction into medicine at the College of Physicians and Surgeons, now Columbia University. I shall leave to others the recital of the outstanding events of his life, and of

those honors which have naturally fallen to him as the merited fruits of his work, to dwell upon his studies abroad under such notables as Waldeyer and von Recklinghausen, and also to describe his preëminence in your civic circles as one who has ever wrought to redeem this new world from that degeneration and premature decay which recently threatens to overwhelm it while still in its youth. Let my pleasant task in this brief hour then be to dwell somewhat on his contributions to medical literature, the luminous exponents of a life of incessant activity in your hospitals and in our medical and surgical societies. Finally, if time permits, let me briefly point out what strides surgery has taken during these past 5 decades in all of which he can justly claim *quorum pars una fui*, "in all of these I had no mean share"!

As a *mis en scene* I cite here a list of his publications as nearly complete as I have been able to make it amidst the incessant clamor of other duties in my daily life. (See list at end of article.—Ed.)

Note the steady output of the grist from his mental mill, a fitting example for us all, an indication that men of experience ever rest under an obligation to summarize and communicate the results of their labors to their fellows beyond the narrow circle of their daily associates and intimates. Several years seem from this literary standpoint to have been somewhat more fruitful than others, but the work still goes on and the more meagre years were undoubtedly those in which experiences were being accumulated to be detailed later after the maturing process of mental digestion. These papers, I take it, are the natural elucidation of those problems which year by year appeared to him most pressing in their demand for immediate solution. I have been astounded as I read them to note his versatility in the range of the subjects covered.

Early in the history of its surgical evolution he resects the bowel (in 1878) successfully for gangrene, taking rank therefore among the pioneers in this most delicate life-saving operation. He writes often on gynecology, as we might expect, and repeatedly with perspicacity on obstetric subjects; on tumors of the breast, at the time almost a *terra incognita* to the gynecologist and just emerging from the distressing era of amputations; on medical expert testimony, ever a crux for our profession; an experimental study on the treatment of cancer with body fluids (1912); an account of some 400 vermiform appendix cases (1909); a pregnant little paper on constipation (1898); an historical study of the work of New Jersey surgeons (1891). I wish we might get up a little club of congenial spirits to meet week by week until we had read and discussed all his writings; there is not one of us but would be benefited by the instruction imparted, and impressed and charmed by



the simple, direct, clear style, as well as held by the cogency of his reasoning. His papers are, every one of them, model chips from a busy, practical scientist's workshop.

Let us now glance at a few which most arrest the attention in this necessarily brief review:

The first paper I have discovered is in the March number of the American Journal of Obstetrics for 1883, 2 cases carefully studied and admirably reported, one with a pathologic examination by Dr. Prudden, a unique specimen of a tumor of the broad ligament which fluctuated greatly in size. I must not enter into details in these comments, but I take it that this unicum was an instance of the good or ill luck of many a youngster who stumbles onto a group of experiences at the outset never again repeated. The perusal of this and the following papers makes me realize with regret what I have lost through not being able to live in closer touch with this aggressive, capable young man who began life with such promise and an ambition destined to be fulfilled through the succeeding decades. I wish this the more earnestly as my own life period of greatest activity in Philadelphia and Baltimore has closely coincided with his.

The next case, reported in that excellent repository, the Medical Record (September 22, 1883), was an exhibition of the remarkable surgical skill and judgment required at that time to make a successful resection of a badly gangrenous, strangulated bowel, an operation which would have made Agnew, Gross, Pancoast or Jimmie Wood envious, not to mention Senn and Brokaw, early workers in this, at that time, new field. Note 3 things in this record: First, the experience, practice and skill begotten of animal experimentation; second, the clear surgical judgment shown throughout, so remarkable in a young man; and third, but by no means least, the careful daily notes kept, foreshadowing a life-long habit. Show me anywhere a young man today who preserves such records and I will unhesitatingly predict his success in life.

The year 1886 notes a successful vaginal total extirpation of the uterus, following in the footsteps of my old friend, long since departed, Paul F. Muncé, the autocratic but admirable editor of the American Journal of Obstetrics. This work placed Dr. Ill as a lineal successor in this field to Czerny, Billroth, Freund, A. Martin (still living), Olshausen and the beloved Max Saenger and Fritsch, genial editor the Centralblatt für Gynaekologie. That first operation, like all our early work in new fields, necessarily overstayed its time, lasting 4½ hours; it was many years before the brilliant facile yet not altogether admirable Doyen of Paris brought it down to the stop watch time of a few minutes. The tabulation of a total of 137 cases from the literature illustrates the careful preparatory

work done and foreshadowed one of his methods which was indeed that of the period. We were all statistical in those days, if we were anything at all. It had its good points.

I am surprised to find how early (1888) Dr. Ill entered the field to discuss that once much mooted subject and our greatest dread, "Psychosis following Gynecologic Operations", a topic which seems latterly, I know not why, to have vanished from our horizon. I trust, as it seems to me, it is due to the fact of the increasing rarity of such sequels.

The same year, (1888) also witnesses the appearance of a substantial paper, in a few years to be amplified by another yet more elaborate, on Dermoid Tumors (shades of Johannes Mueller) of the Abdominal Walls, a charming account in which the interest is aroused and held by the careful study of the case in all its aspects, after which the theme is lightened by a trip across the Hudson to consult the most eminent gynecologist of his day. The luminous authority proposed diagnoses at once negatived and brushed aside by Dr. Ill's previous searching examinations. The great man was finally reduced to the humiliating position of declaring "I don't know what it is", when, like King Charles' army, the patient descended again from the hilltop of the metropolis to Newark where a remarkable operation, boldly conceived and skilfully executed, saved her life, and the large tumor fortunately proved to be a fibroma and not a sarcoma. Dr. Ill must after that have felt fully justified in avoiding the luminiferous but tenuous ether of Gotham and in trusting to his own diagnoses.

I recall an analogous early experience of my own in the mill district of Kensington, Philadelphia. The patient, my first of the kind, a species of youngsters luck, had a monstrous ovarian tumor, bigger than any I have ever seen since. She too had consulted our greatest gynecologist, who failed to operate, so I opened, evacuated and removed it in her poor attic, in the presence, and with the assistance of many friends, and largely filled a washtub with its contents, after which she recovered, to my joy, to spread the reputation of the youngster's wizzard surgery! The professor, hearing of it, dryly remarked, "what a pity, for the young man will be attempting to do others". Perhaps, the most one can say is that he was a prophet.

Dr. Ill has successfully performed that difficult task, because so strenuous and exhausting, of combining a large gynecologic practice with an active practice in obstetrics. Few of us could amalgamate as he has done a line of major surgery, demanding definite appointments to meet staff, anesthetist and consultants at a fixed hour, with another line calling for the immediate abandonment of all engagements to attend a mother in the un-

forseen hour of her importunate necessity. I am afraid that the less conscientious have often for even more trivial reasons than a pressing surgical engagement, sought to abbreviate labor by instrumental delivery—to our humiliation be it said—like the Philadelphia obstetrician who hastening down the street to an expectant mother, seeing a colleague across the way, waved his forceps bag in the air, crying out “Reed birds for supper”!

I note in this connection a thoughtful article on “Forceps As a Means of Rotating the Head in Labor” (1889). It is my impression that Dr. Ill perhaps found relief from the weightier responsibilities of surgery by turning at intervals to this diverse but kindred branch, much as I like to turn to astronomy, geology or herpetology, or to throw myself on Dame Nature’s ever full and sweet flowing bosom for curcease from care. Tracheotomy, also in 1889, for an acute hematoma of the neck, astonishes us with the breadth and catholicity of his surgical horizon.

1892 was a prolific literary year. First I would notice a brief paper I take to be one of the most important on this long and fruitful list, one entitled “Exploration of the Abdominal and Pelvic Contents Under Anesthesia”. This may not appear so striking on the bare statement, but is in my judgment, and I am in the fullest accord with Dr. Ill, that if this practice had from that date onward been widely adopted, an infinitude of unnecessary operations would have been avoided. In a large percentage of cases a deep and searching examination so necessary to an accurate diagnosis cannot possibly be made without complete relaxation of the abdominal walls accompanied by the entire oblivion of the patient only to be secured by complete anesthesia. One may truly say that this minor procedure is one of anesthesia’s chiefest blessings.

Again in this year (1892) follows a greatly extended paper on “Tumors of the Abdominal Walls”, a study which, as we have seen, began with that *cause celebre* in 1888. This and sundry similar reversionions to previous studies show our hero ever to have been the ideal *vir tenax propositi*—the man who gets an idea or a conviction and never lets go.

In “Foreign Bodies in the Peritoneal Cavity Introduced Through the Genital Tract, With Report of a Case”, is brought sharply into view another excellent quality, well worthy of widespread emulation, which I may call the literary principles of the *multum in parvo*—the ability to compress much valuable information into a small compass. One here reads with mingled feelings, first of distress that such sad instances of human infirmity have been so numerous in our history, and second of thankfulness that in so many instances we can now clarify the diagnosis and simplify the operation by preliminary x-ray studies.



Would that there were no limitations to time and patience that I might continue to the very last of these interesting documents, but I must now glance at but few of the remaining admirable contributions and then advert briefly to a matter closely germane. All the earlier papers in what we may call Dr. Ill's formative period serve well to foreshadow the beneficent activities of a long successful career. Truly in this review we can easily see that the youth was father to the maturer man.

A still timely paper (1897) is that on the "Change of Life and the Diagnosis of Carcinoma Uteri"—a subject of ever increasing importance in these later years.

Again, in the same year, comes an admirable discussion on the "Surgery of the Perineum", dealing frankly with the everywhere obvious failures of the older operators and then setting forth the author's conclusions from his carefully accumulated and analyzed clinical data, which led him in the first place, as Kuestner urged, to dissect out the scar as the vital step in defining the proper extent of the denudation. It is my belief that Dr. Ill has had a larger percentage of successes with complete tears than any surgeon of his time. This single claim of itself would justify a great reputation.

Hastening to a conclusion: "Residual Symptoms of Gonorrhea in the Female" (1900) was a timely topic for the new century. "A Rare Papilloma of the Vulva, and the Indication for Operation in Fibroids" followed. And, in quick succession, "Acute Pancreatitis and Fat Necrosis; Lectures on Gynecological Nursing," and that ever pressing subject of "Sterility". I am interested and pleased to read the tribute paid my old friend Todd Gilliam, in Dr. Ill's whole-hearted endorsement of his method of suspension of the uterus in 86 cases (1903), followed by a later paper with an expanded experience of 783 operations by himself and colleagues. "Seven Complete Nephro-Ureterectomies for Tuberculosis" complete this year's excellent tale. Altogether a most fruitful decade. One of his outstanding abiding interests has been the conservative treatment of tubes almost invariably sacrificial (1907), and I must close in pointing to the long list of 440 appendix operations.

Well may we repeat here at the end the ancient maxim *littera scripta manet*, for what would we know clearly of our hero's achievements had he not burned the night oil to erect these monuments more imperishable than bronze.

Dr. Ill manifestly labored as we all must do if we would make our services effective to our day and generation, within the limits of his natural environment imposed by time, but not so much in his case by place. And yet be it noted he exhibits constantly, as he

writes, an irrespressible tendency to peep over these barriers in the prophetic spirit of the true leader.

His own era had many knots to untie, both large and small, and these he unostentatiously assumed as his own personal problems and proceeded to solve with natural skill, trained powers of observation and acute reasoning, backed by sufficient data and with cogent critical analysis.

Over many of his efforts he might well have inscribed the laconic "We have met the enemy and they are ours".

He has routed my own ancient dictum that "If you feel sure you have a good idea, publish it at once, for your mistakes will be pardoned and forgotten, while your successes live and grow"; I plead, however, that this is not altogether unwise as a working hypothesis.

Consider these among many excellencies. The title of Dr. Ill's papers are models of clarity and have great exponential value, the joy of the cataloger.

He exhibits always perspicacity and sanity in unravelling surgical perplexities. His writings are brief, pointed and practical, the method of the over-busy man, with a day usually full of pressing duties; calls to make often at widely scattered points; hurried at meals; with consultations ahead and operations at fixed hours; yet not neglecting the social life of family and friends nor refusing civic responsibilities; lecturing at the hospital, and finally sitting up into the small hours of the night in order to file good records of his cases, and then to squeeze from a weary brain papers already announced on some society's program, which were promised at an unguarded moment when there appeared in the distant vista an illusory hope of some leisure. Where, I now ask you, shall he also find the time for our voluminous medical literature in at least 4 languages, which he perforce must peruse. Is there a profession in the world in all these respects comparable to our own?

Pardon me if, as I recount these accomplishments of my friend, I admit just a little gnawing in my cardiac region which simulates that monster envy. I say this because therapeutically the best way to kill so deadly a disease is to confess it and destroy it in its infancy.

Our exemplar is evidence of the fact that to become a good writer and truly productive, one must form the habit early in life. A valuable adjunct to Dr. Ill's success was the custom of securing autopsies whenever he could, a precious disciplinary experience from which the rest of us too often shirk.

The most salutary habit of anyone's life is that of locking the closed door and placing self in a chair opposite to one, and then of criticising and administering a salutary castigation for faults

committed whether in our professional relations or in our deeper and more personal moral life. Such a discipline may even begin with the words "Thou fool". Dr. Ill ever frankly criticised himself and reported unsuccessful cases and the lessons learned.

That he wisely rested at times in the woods, those balmy restorers of depleted nerves, I well know, for did I not meet him one summer up on the Tobique in New Brunswick hunting for what he called in the plural "meese", justifying the term by the analogy of mouse, plural mice!

An ancient Latin once wrote "*forsitan et haec olim meminisse juvabit*"; we will omit the *forsitan*, Dr. Ill, and confess with what positive pleasure we have recalled these fruitful efforts you have made during these past 50 years to develop and advance the cause of surgery and the relief of mankind from at least a few of that multitude of ills that escaped so long ago from Pandora's box. I am glad to know from your historical paper (1891) of the heroic efforts of some of your medical ancestors in Essex County, a setting of your work comparable to a picture with black clouds and storms and vivid flashes of lightning, rolling away, with a joyous home, a smiling sun and trees and fruitful fields and children at play in the foreground. Yours has been a difficult but a happy lot for it has been crowned with many achievements.

May you be blest to continue yet many years.

If it will not be thought ungraceful for me to utter a petition in this auspicious hour when you must be graciously inclined toward a friend who has long loved you, I beg that I may be allowed to keep (provided you have duplicates) the papers loaned me that I may place them bound in the Hopkins library for the daily use of our students.

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Partial List of Scientific Contributions by Edward J. Ill, M.D.,  
Chronologically Arranged:

- 1883 A Clinical Contribution to Gynecology. Am. Jour. Obst., New York, 1883.
- Circular Resection of the Intestine. Med. Rec., Sept. 22, 1883.
- 1886 A Successful Case of Vaginal Total Extirpation of the Uterus, N. Y. Med. Jour., Feb. 13, 1886.
- 1888 Dermoid (Fibroid) Tumors of the Abdominal Walls. Trans. Am. Assoc. Obstet. & Gynecol., September, 1888.
- 1889 The Forceps as a Means of Rotating the Head in Labor. Trans. Am. Assoc. Obstet. & Gynecol., September, 1889.
- 1891 An Attempt to Show What New Jersey Surgeons have done in Abdominal Surgery. Trans. Med. Soc. New Jersey, 1891.
- 1892 Exploration of the Abdominal and Pelvic Contents Under Anesthesia. Am. Gynecol. Jour., August, 1892.
- Foreign Bodies in the Peritoneal Cavity, Introduced Through the Genital Tract; With Report of a Case. N. Y. Jour. Gyn. & Obst., October, 1892.
- Tumor of the Abdominal Walls. Trans. Am. Assoc. Obst. & Gynecol., 1892.



- 1895 A Clinical Contribution to the Study of Lateral Displacements of the Uterus. *Am. Jour. Obst.*, October, 1895.
- 1897 A Contribution to the Surgery of the Female Perineum. *Internat. Jour. Surg.*, February, 1897.  
The Change of Life and the Diagnosis of Carcinoma Uteri. *Med. Rec.*, Oct. 9, 1897.  
The Treatment of Puerperal Endometritis by the Carossa Method. *Am. Assoc. Obst. & Gynecol.*, 1897.
- 1898 Remarks on the Treatment of Constipation. Read before the Practitioners' Club of Jersey City, Nov. 8, 1898.
- 1900 The Indications for and the Election of Operation for Uterine Myoma. *Am. Med. Quarterly*, April, 1900.  
Papilloma of the Vulva, with Specimens. *Am. Assoc. Obst. & Gynecol.*, 1900.  
Residual Symptoms of Gonorrhea in the Female. *Ann. Gynecol. & Pediatrics*, October, 1900.  
Emergency Cases Requiring Abdominal Surgery, and Their Diagnosis. Read before the Hunterdon County Medical Society, Oct. 23, 1900.
- 1901 Lectures on Gynecologic Nursing. Delivered to the nurses of St. Barnabas Hospital, of Newark, N. J.  
Report of a Case of Acute Pancreatitis and Fat Necrosis. *Am. Jour. Obst.*, Vol. XLIV., No. 5, 1901.
- 1902 The Causes and Treatment of Sterility in Women. *Trs. Med. Soc. New Jersey*, 1902.
- 1903 Etiology and Prophylaxis of Lesions of the Female Pelvic Tract Following Labor. *Am. Jour. Obst.*, Vol. XLVII., No. 1, 1903.  
The Gilliam Operation: A Clinical Contribution. *Am. Jour. Obst.*, Vol. XLVIII., No. 5, 1903.  
The Lateral and Retropositions of the Immobile Uterus, Their Clinical Significance and Treatment. *Brooklyn Med. Jour.*, September, 1903.  
A Clinical Contribution to the Knowledge of Tubercular Diseases of the Female Urinary Tract. *Ann. Surg.*, October, 1903.
- 1904 The Etiology and Pathology of Salpingitis. *N. Y. State Jour. Med.*, March, 1904.
- 1905 Papillary Cystadenoma of the Breast. *Am. Jour. Obst.*, Vol. LII., No. 5, 1905.
- 1907 The Sensitive and Short Uterosacral Ligament: Its Clinical Significance and Treatment. *Trs. South. Surg. & Gynecol. Assoc.*, 1907.  
Myofibroma Complicating Pregnancy; Hysterectomy. *Am. Jour. Obst.*, Vol. LVI., No. 6, 1907.  
The Conservative Medical Treatment of Salpingitis. *Am. Jour. Obst.*, Vol. LVI., No. 6, 1907.
- 1908 Medical Expert Testimony. *Jour. Med. Soc. New Jersey*, 1908.
- 1909 The Differential Diagnosis of Tumors of the Breast. *Jour. Med. Soc. N. J.*, 1909.  
Hospital Control in Its Relation to the Staff. *Jour. Med. Soc. N. J.*, March, 1909.  
A Study of 440 Operations on the Appendix. *Am. Jour. Obst.*, Vol. LX., No. 5, 1909.
- 1910 Carcinoma of Uterus in a Child: Operation; Recovery. *Jour. Med. Soc. N. J.*, 1910.
- 1911 Secondary Repair of Complete Perineal Laceration; its Technic and Results. *Am. Jour. Obst. & Dis. Women and Children*, Vol. LXIII., No. 1, 1911.  
The Treatment of Acute Puerperal Sepsis. *Am. Jour. Obst. & Dis. Women and Children*, Vol. LXIII., No. 4, 1911.
- 1912 An Experimental Study of the Treatment of Cancer with Body Fluids. *Jour. A. M. A.*, Aug. 17, 1912.
- 1913 Obstetrics and Gynecology in the History of Our Race. *Jour. Med. Soc. N. J.*, 1913.  
Cancer of the Uterus and Fibroid Tumors from a Clinical Standpoint. *Am. Jour. Obst. & Dis. Women and Children*, Vol. LXVIII., No. 5, 1913.  
Further Experiences with the Gilliam Operation for Suspension. *Am. Jour. Obst. & Dis. Women and Children*, Vol. LXVII., No. 2, 1913.
- 1914 The Treatment of Albuminuria in Pregnancy. *Jour. A. M. A.*, July 11, 1914.

- 1916 The Indications for Surgery. Jour. Med. Soc. New Jersey, 1916.  
1918 Nonpuerperal Pelvic Infection. Am. Jour. Obst. & Dis. Women and Children, Vol. LXXVIII., No. 1, 1918.  
Observation on Fibroid Tumors of the Uterus. N. Y. State Jour. Med., October, 1918.  
1919 Accidental Removal of Intestines Through the Vaginal Vault. Am. Jour. Obst. & Dis. Women and Children, Vol. LXXIX., No. 1, 1919.  
1920 Surgery of the Uterine Fibroids. N. Y. State Jour. Med., October, 1920.  
1921 Carcinoma of the Female Pelvic Organs. Jour. Med. Soc. New Jersey, 1921.
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## SALUTATION FROM THE STATE MEDICAL SOCIETY.

LUCIUS F. DONOHUE, M.D.,

Acting President, Medical Society of New Jersey.

We are here tonight to pay tribute to the Grand Old Man of the Medical Profession of New Jersey. Yet, I must qualify that statement by saying that Dr. Ill is far from being old; in fact, he has been one of the most outstanding examples in discrediting the theory attributed to Dr. Osler.

Dr. Ill has had a most interesting career in medicine. Beginning in the high days of the general physician and surgeon, in the early period of his practice, and continuing down to the present time of highly specialized and scientific medicine, he has throughout this half century, not only kept abreast of the rapid advances and changes of the periods through which he has passed, but by his far-sightedness and initiative has been in advance of most of his profession and may be considered a pathfinder in the field of his specialization. The personal attributes which have made this achievement possible would have caused Dr. Ill to have risen to the top in any profession or occupation. His indomitable will and energy, his capacity for hard work, his clear-sightedness, his scientific perception, his courage and perseverance are characteristics of success.

There must be a great deal of the human element in a man who is able to follow the strenuous work and anxiety entailed in 50 years of the practice of medicine. A man practicing medicine purely for commercial gain would have been unable to retain the continued interest which Dr. Ill has carried out in his life. Such a spirit is only possible through an intense interest in human welfare, actuated by the greatest unselfishness, an unselfishness which is always willing to give of itself unstintingly whenever demands are made upon it. This applies not only to his unselfishness as a physician and surgeon, but also to his service to the younger men of the profession, the young practitioner and hospital intern, to whom Dr. Ill was always willing to unfold the wealth of his knowledge. I feel that this intimate contact with the youth of the pro-

fession, is one of the factors which has aided in keeping him young. It is certain that he has always been willing and anxious to give his aid, in suggestion and advice, to the young doctor.

His services have not been confined alone to the sick, or to the younger men of the profession, but he has been one of the most active of men in his County Medical Society and in the Medical Society of the State of New Jersey. He has been President of both the County and State Societies, and is still active in the work of the latter as one of its trustees. He has done much as a physician and as a citizen to honor the City of Newark and the State of New Jersey, his native state. He has done much not only in looking after the public health, but in maintaining throughout his long activity, the highest standards and ethics of the medical profession.

It is well to note that Dr. Ill's reputation is not confined to Newark, nor to the State of New Jersey, nor even to the United States, but that he is one of the few American surgeons known abroad for his writings and his teachings along progressive scientific lines. He has always held, and after these many years of practice still maintains, a position in the ranks of the foremost surgeons of the world.

On behalf of the State Society, which I have the honor to represent, I wish to convey to you, Dr. Ill, the best wishes of our officers and members, and to thank you for your long and continued interest in the welfare of our profession. You have had a long and successful career in medicine, a career not yet terminated, a career which must have had as an accompaniment much happiness in the knowledge of work well done, but not yet finished. In the words of Browning, "The best is yet to be; the last for which the first was made".

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#### GREETINGS FROM THE ESSEX COUNTY MEDICAL SOCIETY.

C. RUTHERFORD O'CROWLEY, M.D., President.

Mr. President, Honored Guest, Honored Speakers, Ladies and Gentlemen: This is indeed an auspicious occasion and one hardly knows where to begin. As President of the Essex County Medical Society, it becomes my pleasant duty to say a few words at this time, when one of our fellow members is being so signally honored. Dr. Ill was President of the Essex County Medical Society in 1896, when the society had scarcely 200 members; whereas today we boast the proud number of nearly 600 members. Dr. Ill did not drop into a state of inactivity upon completion of his presidency but has continued ever since to give to the society his time, de-



votion and wisdom. Nearly every year since 1896, he has been on the society's council or chairman of some important committee. We just felt that we could not get along well without him. At the present time, he is one of the society's council and chairman of the most important committee the society has. When I went to Dr. Ill to ask if he would take the chairmanship of this committee he very modestly said he would if I wanted him to and if I thought he could fill the bill. Right there he exhibited one of his many natural good qualities, the desire to help in any way he could the profession of Essex County, although there were many calls upon his time and ability. He is one of the greatest exponents of our Hippocratic doctrine, because he has always put the humanitarian call above everything else. Dr. Ill has been rightly called the Dean of the Profession and we all look up to him and admire him for his numberless sterling characteristics. His professional ability is paramount, his kindness sincere, his advice unselfish, his manner modest and cordial, his dignity sublime, his wisdom universal and his friendship golden.

I have known Dr. Ill personally for over 20 years. When I first started in the practice of medicine, in fact, before starting out on my career, I had an interview with him relative to where I should begin to practice. His unselfish advice and mature reasoning given to me at that time was of untold benefit to me and I pride myself upon the friendship he has accorded me through all these years. This vast audience here tonight is a wonderful demonstration and testimonial of friendship to a man who values it above all else. Dr. Ill's type of friendship is the kind spoken of in the verse:

"There is no friend like an old friend,  
Who has shared our morning days.  
No greeting like his welcome,  
No homage like his praise."

"Fame is the scentless sunflower  
With crown of gaudy gold;  
But, friendship, is the breathing rose,  
With love in every fold."

There are many physicians who, when they have practiced much less than Dr. Ill's 50 years, are content to be known as the obsolete old family doctor. No so with our esteemed guest, for he has diligently kept abreast of medical progress and is a truly medical modernist. Dr. Ill has been the foremost man in our profession in regard to cancer control and his efforts in that direction are too well known to you all for me to elaborate upon them.

This testimonial meeting is a proper and fitting function and

there should be more of them to those who are deserving. Kiss today the living brow. Say the nice and true things about one while he is still here.

Dr. Ill: I am proud to be here this evening, and to be spokesman for the Essex County Medical Society, and the message I bring from your fellow members is the hope that you may have many years of continued usefulness in the profession, enjoy good health and stay always in our hearts and thoughts.

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### FELICITATIONS FROM AN OLD PUPIL.

THOMAS DARLINGTON, M.D.,

Formerly President New York City Department of Health.

Though I had no expectation of speaking when I came here, and had therefore no preparation, I have been so moved by the addresses and resolutions, that I feel I must say a few words relative to this exponent of that great profession, which, founded 400 years before the birth of Christ, the chosen work of the Saviour himself, stands today as the most lofty, the most far-reaching and the most benign of all modern sciences.

Tonight has brought back very vividly the scenes of 44 years ago, when I was the assistant and first associate to Dr. Ill. I was the one who carried the specimens, for him, to Dr. Prudden. You have heard of Dr. Ill's wonderful success in the early years, success that was due, in my opinion, to the great care and study which he exercised in relation to every case. No detail was too small for his supervision, and no one too mean for his personal interest. And, if I have made any success in medicine, it is partly due to the careful training I received while with him.

I remember well those first ovariectomies. How careful were his instruction to me in the preparation for the operation, and in those days everything had to be done—nothing could be bought; even the silver wire he drew himself. How difficult were the operations, for in these first few operations sprays were used which, among other things, it was my business to keep going, and how these sprays would cloud Dr. Ill's glasses, a serious handicap in these early operations. And yet, these patients all recovered; due, I think, to the after-care, for when I sat up at night with these early cases Dr. Ill would come in after midnight and see if everything was going well; an attention that was not easy in those days of travel with horse and carriage.

In recent years, it has been the habit of many surgeons to give hot water internally upon recovery from ether, but Dr. Ill did that in these early cases in 1881, so far as I know, fully 20 years be-

fore anyone else suggested it. He was always like that—always 20 years or more ahead of his time, and I could relate many other instances to prove this, but time will not permit my going into details.

But there is another aspect of his life to which I wish to call your attention. No patient was too poor and no house too humble for him to visit and relieve distress. He was not rich in those early days, and with his constant care for others he sometimes neglected himself.

Indeed, it could have been said of him, as the doctor's wife said of her husband in Dicken's "Bleak House": "We are not rich in the bank, but we have always prospered, and we have quite enough I never walk out with my husband but I hear the people bless him. I never enter a house of any degree, but I hear his praises, or see them in grateful eyes. I never lie down at night but I know that in the course of that day he has alleviated pain and soothed some fellow creature in the time of his need. I know that from the beds of those who are past recovery, thanks have often, often gone up for his rich ministrations."

How much more I could tell you of these old days—of him and his work. But I will say only one thing further, and that is, how he appears to me in the present day, and with that I will close:

"An old man, going a lone highway,  
Came at the evening, cold and gray,  
To a chasm vast and deep and wide.  
The old man crossed in the twilight dim,  
The sullen stream had no fear for him;  
But he turned when safe on the other side  
And built a bridge to span the tide.  
'Old Man,' said a fellow pilgrim near,  
You are wasting your strength with building here;  
Your journey will end with the ending day,  
You never again will pass this way;  
You've crossed the chasm deep and wide;  
Why build you this bridge at even tide?"  
"Good friend, in the path I have come", he said,  
"There followeth after me today,  
A youth whose feet must pass this way,  
This chasm that has been as naught to me,  
To that fair-haired youth may a pitfall be;  
He, too, must cross in the twilight dim—  
Good friend, I am building this bridge for him!"

Let us, emulating the example of Dr. Ill, be also "Bridge Builders" for the youth of the future.



## MESSAGE FROM THE NEW YORK OBSTETRIC SOCIETY.

DELIVERED BY GEORGE W. KOSMAK, M.D.,

Editor, American Journal of Obstetrics and Gynecology.

Mr. Chairman, Ladies and Gentlemen:

I am honored to be present as the guest of your Society and to have been delegated by the Council and Fellows of the New York Obstetric Society to convey to Dr. Ill the felicitations and congratulations appropriate to an occasion of this kind, from his many friends and associates among the gynecologists and obstetricians of New York, who thus desire to recognize and honor him and his work.

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AN AFFECTIONATE MESSAGE FROM A BROTHER  
PRACTITIONER.

JAMES H. ROSECRANS, M.D.,

Hoboken, N. J.

One side of the character of our honored Dr. Edward J. Ill has not yet been mentioned, and I wish to say, that there is hardly a doctor's family, or a doctor in Northern New Jersey, who has not had his help or advice in time of trouble. If he hears of your sickness or distress, he is the first to pay a visit.

As the President of The Society for the Relief of the Widows and Orphans of Medical Men of New Jersey, he has freely given of his time and money. He has given the world an example of a man who has written his name in *love* and *kindness* on the hearts of medical families, so that his name shines as a star in the firmament of Heaven.

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RESOLUTIONS ADOPTED BY THE BOARD OF TRUSTEES  
of the

ACADEMY OF MEDICINE OF NORTHERN N. J.

PRESENTED BY JOHN F. HAGERTY, M.D.

Mr. President, Honored Guests, Ladies and Fellow Members:

It has given the members of the Council a great deal of pleasure to arrange this meeting in honor of the Golden Jubilee of the graduation of Dr. Ill, and to express in some slight degree their appreciation of his skill and worth as a practicing physician and surgeon during all these 50 years. Such a life as his, in one of the noblest but most exacting of callings, with its cares and anxieties and innumerable occasions demanding the highest skill and most conscientious care represents an enormous amount of work and

sacrifice, which only his brother practitioners can appreciate and testify to. And this they do gladly, realizing the value, not only to the public which has been the recipient of his skillful ministrations during these years, but especially to the Medical Profession on whom the influence of such a life so well spent, must be of incalculable benefit.

That this fact is appreciated is attested by the presence of the President of our State Society, who brings greetings from the profession throughout the state, and the President of our County Society who brings tributes from his more immediate and intimate colleagues; and we have all listened with great pleasure to the address of one of the most highly honored and illustrious members of our profession, who has at great personal sacrifice come to add his meed of praise, but it must not be forgotten that the memory of the spoken word does not last, indeed, however eloquent and impressive, it is soon or later forgotten, and the Council of the Academy, wishing to put in some imperishable form their sentiments of regard and admiration for Dr. Ill, has had a set of resolutions prepared which I ask the privilege of reading.

Whereas: Dr. Edward J. Ill, first President of the Academy of Medicine of Northern New Jersey, has been engaged in the Practice of Medicine in the City of Newark, 50 years, a period of service not often experienced by members of his profession, and

Whereas: During these years he has been an exemplar and guide to all as an earnest, conscientious, high minded adherent to the principles of the true Physician; honorable, industrious, dignified and kindly to the poor, and

Whereas: By his merits as a Physician and Surgeon, Writer and Consultant, he has earned the esteem and approbation of medical men, not only in his own state, but throughout the United States, who have shown their regard for him by election to membership in Scientific Societies and to positions of trust on Hospital Boards, and has thus reflected honor and credit on the Medical Profession of his native city and state, and

Whereas: Dr. Ill was the first President of our Academy of Medicine, the success of which during the past 14 years has been due, in large measure, to the auspicious start it received at his hands, a member of the Board of Trustees since its organization, regular in attendance at its meetings, contributing from time to time papers and helpful comments from his remarkably extensive experience, and but lately, as a mark of his interest and devotion to the Academy, donating his invaluable collection of books and journals, with a sum of money sufficient to care for these priceless volumes.

Therefore Be It Resolved: That the Academy of Medicine

of Northern New Jersey rejoicing that one of its members, so loyal and generous has been privileged to complete a half century, as practicing Physician and Surgeon, and realizing the inestimable value of his service to the community and the Profession of the city and state, and appreciating his interest and attachment to the Academy, offers to him its heartiest congratulations, and felicitates him on the success and honors that have come to him, and the admiration and esteem of the Profession and Citizenship of his city and state, on the health and bodily vigor which he enjoys after such a long and arduous life, and prays that he may be spared many years to enjoy the fruits of his labors, and the companionship of his family and friends.

Signed for the Trustees:

H. J. F. Wallhauser, M.D., President,  
E. D. Newman, M.D., Secretary,  
John F. Hagerty, M.D., Trustee.

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#### RESPONSE TO TESTIMONIAL.

EDWARD J. ILL, M.D.

Mister President, Fellows, Ladies and Guests:

I do not know what to say. What can one say under such circumstances? Why, I did not know, myself, what a great and good man I am. I thank you for the compliments you have paid me, but you have said more nice things about me than I have earned. To have and to hold the respect of the community in which one lives, should ever be one's aim, and to have gained the respect of one's fellow practitioners ought to be our highest ambition.

To have lived and practiced medicine for 50 years through this period of our civilization is a gift one is thankful for. To have known such men as Virchow, Billroth, Hégar, Scanzoni, among illustrious foreigners, and Sims, Thomas, Emmet, Alonzo Clarke, Janeway, Sands, Welch and, though last not least, my friend Howard Kelly, is indeed something to be proud of.

To those of you who are concerned with the interest of this Academy, let me say that this institution should be a very democratic one. Let every honest practitioner come in and be able to say—"This is my home, my house, this has been created for me and as it belongs to me so I belong to it". When we do that and are able to recognize the truth in it, then will this Academy of Medicine flourish as it should.

Permit me to thank the Council for these resolutions and to say that if ever I fail to show appreciation of the kindness of this institution and its fellows, may I be stricken down.



## THE GENESIS OF CAMDEN CITY MEDICAL SOCIETY.

DANIEL STROCK, M.D.,

Camden, N. J.

(Read before the Camden City Medical Society, December 2, 1924.)

The Camden City Medical Society was organized June 2, 1853, and Dr. Isaac S. Mulford was elected president, in which capacity he served 2 years. The formation of the society was not a hastily thought of event, but the result of mature deliberation, as there was believed to be need of a closer coöperation among members of the profession than the Camden District Medical Society afforded, as the meetings of the latter society were infrequently held and poorly attended; and further, there had been more or less discord and controversy among its members, practically ever since its organization, in 1864. Therefore, the members of the profession in Camden City met together on the above date, informally organized the Camden City Medical Society and elected officers, and appointed a committee to prepare a Constitution and By-Laws. This instrument was formally adopted at an adjourned meeting held June 16, 1853. No charter has ever been obtained for the society.

It may be of interest at this time—after an interval of 72 years—to note that the constitution provided for 4 meetings a year, namely, March, June, September, December; a standing committee to transact the business of the society in the intervals of the meetings; a membership limited to regular graduates who have complied with the medical laws of the State of New Jersey; the adoption of the Code of Ethics formulated by the American Medical Association, and the fee bill approved by the Medical Society of New Jersey. It is evident, that even in those remote times patients did not promptly reimburse their physicians, as a clause of the constitution enjoined upon each member the duty of reporting to the secretary of the society the names of all delinquent patients, and it was the further duty of the secretary to arrange such names alphabetically and furnish a copy to each member for guidance. This provision of the constitution soon became unpopular, and was abandoned.

Following organization, the first annual meeting was held September 1, 1853. At this meeting, Dr. Richard M. Cooper (afterward one of the founders of the Cooper Hospital) discussed the subjects of remittent and intermittent fevers, and said they were most prevalent in the southern section of Camden because of the marsh lands and the prevalence of southwest winds. As the population increased and the improvements of the city were extended, he believed intermittent fever would cease its annual visitation and

give place to typhoid fever, which was most prevalent in north Camden, where the greatest improvements had been made. In 1855, the subject of water supply of Camden began to engage the attention of the members of the society. At one of the meetings Dr. Othneil H. Taylor read a paper on the "Hydrant Water of the City". At the annual meeting in September, Dr. Richard M. Cooper was elected President; in 1856 Othniel H. Taylor was President, and in 1857 Dr. Thomas F. Cullen was President.

In 1858, the water supply of Camden was again the subject that earnestly engaged the attention of the society, and at the June meeting, Dr. Sylvester Birdsell read a paper on "The Hydrant Water of Camden As a Cause of Dysentery". In 1849, there had been an epidemic of cholera in Camden and since that time the contaminated water supply of the city had been considered the chief cause of intestinal disorders. As a result of the presentation of the subjects in this paper, a committee of 3 members was appointed to investigate the matter. A special meeting of the society was held in August, 1858, and the committee submitted a report, demanding a better water supply. The report was sent to the directors of the Camden Water Works Company. Apparently, nothing was effected by this action of the society, as the Company supplied water from the Delaware, at Pavonia, and there is no reason to believe it was deemed possible to change its quality. It is of interest to note in this connection, that Dr. W. G. Thomas, of Camden City, died in August 1858 of dysentery, and this further accentuated opposition to the Camden Water Works Company. In 1858, Dr. Sylvester Birdsell was elected President.

The members of the society had long recognized the necessity and importance of a dispensary in the city, and the members, in their individual capacity had from time to time discussed the project; but it was at the meeting in March, 1859, that Dr. Othneil H. Taylor brought the matter officially to the attention of the society, and suggested that a committee be appointed to memorialize the City Council and request it to coöperate in the establishment of such an institution. Plans for the organization of a dispensary were submitted to the Council and the interest of the physicians and influential citizens secured, but Council viewed the subject with indifference, resulting in the indefinite postponement of the project. At this meeting Dr. John V. Scheck was elected President.

In 1860, very little interest was taken in the society, but one outstanding thing was done—Dr. H. Genet Taylor was elected to membership, an associate who was destined to be of extreme value to the City Society, the County Society and the Medical Society of New Jersey. At the September meeting Dr. Henry Ackley was elected President. In 1861 the lack of interest continued. At the March meeting 7 members were present; in June, 5; at the Sep-

tember meeting, 4. At this meeting Dr. H. Genet Taylor was elected President, but he soon thereafter entered the United States Volunteer Service, as Assistant Surgeon. In 1862 still less interest was manifested in the society, and no officers were elected.

In 1863 there was a renewal of interest in the work of the society, and force of circumstances caused the members to give greater attention to details of sanitation. The renewed interest was largely due to a resolution offered at the March meeting by Dr. T. F. Cullen "requesting each member to make a clear and succinct report of at least one case occurring in his practice, in which any peculiarity in character of treatment is noticed". At the September meeting the sanitary condition of Camden was discussed, especially the water supply of the city, because of the appearance of a peculiar form of diarrhea, resembling asiatic cholera. Again the Camden Water Works Company was denounced and City Council was urged to declare the company a nuisance. In December a committee was appointed to arrange for the approaching meeting of the Medical Society of New Jersey, which was to be held in Camden.

It may not be generally known to the members that the Medical Society of New Jersey held its sessions in Camden on 2 occasions—in 1849 and in 1864. At the January, 1864, meeting, that Society was entertained by Dr. Richard M. Cooper. The names of the officers elected in 1864, if any were elected, are not recorded.

In 1864, a determined effort was made by the society to increase the fee to \$1.00 for visits within the city limits, and the minimum obstetrical fee was fixed at \$6.00. All the members subscribed to this fee bill, and it was published in the 2 city papers. During this year spotted fever and smallpox prevailed in Camden and were the subjects of earnest discussions at the society meetings. In considering the epidemic of spotted fever, the members all agreed that free stimulation offered the only hope of success. There were no officers elected this year.

In 1865, the chief topics considered were the establishment of a dispensary, and, cholera, and on September 7 a special meeting was called to consider the latter subject. Dr. Thomas F. Cullen was elected President. In 1866, the subject of cholera continued to engage the attention of the members, and the dispensary became an accomplished fact, the association having purchased the Perseverance Hose House, where a room was prepared for the use of the society, which met there for the first time on March 21. Dr. J. M. Ridge was elected a member, and also elected President, not an unusual occurrence in those days, when so few were members.

In 1867, Dr. Alexander Marcy was elected President, and in 1868, Dr. Alexander Mecray was the President. In 1868, an effort was made to establish a uniform fee for postmortem examinations, but the matter was not finally settled. In 1869 the subject of the fee



for postmortem examinations was further considered, and it was decided the fee should range from \$5.00 to \$40.00; that a member should decline to make such examination for the Court or any Coroner until the fee bill adopted should be agreed to by them. Notice of this action was sent to the County Judges and Coroners; but the matter remained a subject of contention until the law providing for a County Physician was enacted in 1877. No officers were elected this year, as the annual meeting was not held.

In 1870, Dr. J. Orlando White was elected President, but in 1871 no officers were elected, as no quorum was present at the meeting.

In 1872, no meetings were held in March or June, but in September the annual meeting was held, and Dr. Reynell Coates was elected President. At this meeting an earnest effort was made to revive interest in the society and the hold-over President, Dr. J. Orlando White, delivered an address "On the Apathy of the Camden City Medical Society in Those Interests and Objects for Which It Was Organized". It was decided that hereafter the meetings should be held at the houses of the members, and this custom was continued for many years with material benefit. At the December meeting, it was decided that the fee for a visit to a patient should be \$2.00, and obstetric fees from \$15. to \$20. The announcement of this change of fee was made in the papers, but it met with decided disapproval on the part of the citizens, and, because of this, and because certain nonmembers of the society continued to charge \$1.00 a visit, the project was soon abandoned.

In 1873, Dr. Isaac B. Mulford was elected President. As a result of the meetings being held at members' houses, the popularity of the society increased, and the meetings were held with regularity throughout the year. In July, a special meeting was called to consider cholera, which was rapidly extending from New Orleans through the West and East, there having been 3 cases in Camden, 1 proving fatal. In 1874, Dr. D. P. Pancoast was elected President. During this year efforts were made to induce Council to amend the ordinance relating to reports of births and deaths, and to appoint a City Physician, but the requests were not granted by Council. In 1875, Dr. Alexander M. Mecray was elected President. A case of yellow fever was reported by Dr. Thomas F. Cullen.

In 1876, Dr. Maximilian West was elected President; in 1877, Dr. Elijah J. Snitcher; and in 1878, Dr. William P. Melcher. At the March meeting, Dr. E. L. B. Godfrey reported a case of resuscitation of an individual apparently drowned, after 10 hours of continuous efforts, but he does not state what method was used. In 1879, but one meeting of the society was held, and there is no mention that officers were elected. In 1880, the interest in the society became practically nil, but there were a few members who deplored this condition of affairs, and a special meeting was called for March

24, at which a committee was appointed to consider the problem that confronted the earnest ones, and the meeting adjourned to convene on April 8. But this meeting was so poorly attended that no further effort at reorganization was attempted until September 7, 1882, when, on invitation of Dr. Dowling Benjamin, the society met at his house, where a reorganization was effected, and Dr. William A. Davis was elected President. In 1883, apparently, interest in the society revived, and regular quarterly meetings were held during the year. Dr. William H. Iszard was elected President. In 1884, interest in the society again declined and but 2 meetings were held. Dr. E. P. Townsend elected President.

In the early portion of 1885, lack of interest in the society was still manifest, and the March meeting was not held, but in April, a special meeting was called to consider the advisability of establishing a Board of Health in Camden, under the State law. A committee was appointed to consult with the Secretary of the State Board of Health and the Sanitary Committee of City Council. The action of the society resulted in organization of the Camden City Board of Health. At the annual meeting in September, a resolution was adopted, providing for monthly meetings at the dispensary; for the appointment of an essayist for each meeting, and for the serving of a collation for the members. This was the turning point in the history of the society, and the interest in its proceedings was markedly increased. The meetings were held in the upper room of the Camden City Dispensary, No. 46 North Third Street, and papers of interest were read and discussed. Frequently, foreign talent was imported to give éclat to the proceedings, and names prominent in Philadelphia medical circles are frequently mentioned in the minutes—even as is the case today. Dr. J. F. Walsh was elected President.

In 1886, Dr. Onan B. Gross was elected President. The meetings were held regularly, and 7 physicians were admitted to membership. In 1887, no mention is made of the election of officers, but the meetings were regularly held, and 3 new members were elected. In 1888, a new Constitution and By-Laws became operative, which provided for the election of the officers in January, and Dr. Henry H. Davis was elected President. Heretofore, reports of surgical operations were very infrequently mentioned in the minutes, as those requiring surgical relief were removed to one of the Philadelphia Hospitals; but on August 11, 1887, the Cooper Hospital was opened for the admission of patients, and soon thereafter reports of major operations were made to the society by some member of the surgical staff of that institution, and such titles as "Removal of the Uterine Appendages", "Ovariectomy", "Abdominal Section", and others now appear in the minutes. In those days the members of the surgical staff did all manner of operations, and each surgeon was a specialist in all that pertained to surgical work. In 1889, Dr.

E. L. B. Godfrey was elected President. During this year we meet with titles of papers that are unknown in our meetings today—namely, "The Cause of Typhoid Fever", "Typhomalarial Fever", "Typhlitis".

In 1889, Dr. Sophis Presley was elected a member, she being the first woman physician thus distinguished.

In 1890, Dr. Daniel Strock was elected President. In 1891, it became Dr. Howard F. Palm's turn to be President, and this year the discussion of the Camden City water supply was resumed. In 1892, Dr. Alexander MacAlister was elected President. In September, Dr. Palm, who had been appointed chairman of a committee on the registration of midwives, reported that he had examined the records of births at the City Hall and found there were 26 midwives in active practice in Camden; that they had attended about 25% of the cases reported. Again cholera and the water supply were discussed. In 1893, Dr. Geo. T. Robinson was elected President. The society was active during this year, many papers on medical and surgical subjects having been read and discussed. In 1894, Dr. Joseph H. Wills was elected President and in 1895, Dr. Orange W. Braymen was the President. Nothing of special interest occurred during the years 1894 and 1895, though the water supply of Camden received earnest attention.

It was my intention to continue this review to the year 1899, but already it must have become tiresome; still I cannot resist asking you to consider 2 projects of particular interest to the profession and citizens of Camden that had engaged the attention of the members practically ever since the formation of the society—namely, the institution of the Camden City Dispensary and the Camden City Water Supply.

In 1859, a more determined effort was made to establish the dispensary, and Dr. Othneil H. Taylor, at the March meeting moved that a committee be appointed to memorialize Council to coöperate with the society to establish a dispensary. But, Council felt no interest in the proposal, and the matter was postponed, though the society did not abandon the idea.

In 1864, the county was in the midst of the Civil War, and there were men who were unable and unwilling to enlist in the Army, and to permit these men to remain at home, by paying the bounty the Government exacted, the North Ward Bounty Association was formed to which the citizens contributed liberally. Before the quota of the county was completed the Confederacy surrendered, on April 9, 1865. A surplus of \$3,776.91 remained in the treasury, which was ordered to be expended on some charitable institution, and a committee was appointed to consider the disposition of this fund. The Camden City Medical Society was informed of this action of the Bounty Association, and at once appreciated the opportunity to



establish a dispensary under its management. The society met in special session on May 4, 1865, and a committee was appointed to confer with the committee of the County Association, and, as a result of the conference, plans were adopted for the founding of a dispensary. But the project was delayed by an appeal to the Courts on behalf of certain contributors to the fund. The action of the Association was sustained by the Courts, and early in the year of 1866, \$2005.46 were expended in purchasing the Perseverance Hose House, on the east side of Third, below Market Street, and fitting it for a dispensary. A room was set apart for the use of the Camden City Medical Society. On March 17, 1866, the building was formally conveyed to the Medical Society, and on March 21, the society, for the first time, convened in the room provided for its use, and continued to meet there until that building was sold. Thereafter, the society met at 532 Market Street until a new building was erected, which is the building now occupied by the dispensary.

The dispensary was incorporated February 5, 1867, and the City Society wisely provided that 8 of the 15 incorporators should be members of the Camden City Medical Society thus, by virtue of incorporation, the Camden City Medical Society is the Camden City Dispensary. This society, and the Camden County Medical Society are peculiarly pleasantly situated in having spacious and pleasant rooms for meeting purposes, and all the members should realize their lines are, indeed, cast in pleasant places. There are no societies in the State less nomadic than these—one owning the property, the other not compelled to meet from place to place, or pay rent. We, as physicians and members should feel we owe a debt of appreciation to those persistent pioneers and public spirited members of this society who so earnestly labored, and who so frequently were rebuffed, that their successors could receive the benefits we enjoy today.

It will have been observed that one of the subjects that has persistently appeared in the discussion of the members was the Camden City Water Supply, a subject that more seriously engaged the attention of the physicians than it did the citizens who were ill or dying because of its unwholesome qualities. At the time the society was organized, the Camden City Water Works Company supplied the city with water, and the wells were where the Esterbrook Pen Factory now is located, but in 1854, the year following the formation of this society, the city received its water from the Delaware River, at the Pavonia pumping station. This sewage-laden water proved no more satisfactory than the previous supply, and the water-borne diseases—cholera infantum, cholera morbus, typhoid fever—continued and waxed more potent for evil, as the contamination of the water increased, due to the larger volume of sewage emptied into the river, the result of increased population

of Camden, Philadelphia, and the nearby towns of the riverside, until, in the eighties and early nineties, when I became acquainted with the situation, those diseases were mainstays of the physician's practice. During the latter period, just mentioned, the efforts of the members of this society became more persistent, and in papers read at its meetings, in newspaper articles, and in public addresses, the crusade was carried on, in spite of the opposition, and, in some instances, the revilement of the politicians and city officials, until, at last, public sentiment demanded the change which was made in 1898. And thus, as result of the unselfish and public spirited agitation of this important subject by the members of this society, at its meetings and in other capacities, the sewage-polluted water of Camden was abandoned—a water supply that killed its thousands—and a pure supply substituted. But not by word or deed have the civic authorities or the citizens of Camden ever given any credit to the medical profession for its great part in this vital transformation—a transformation that has banished typhoid fever, dysentery and cholera infantum from our midst, saved thousands of lives, and added to the commercial importance of the city.

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### **TREATMENT OF PNEUMONIA WITH DIATHERMY.**

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HENRY H. KESSLER, A.B., M.D.,  
Newark, N. J.

Physiotherapist, Newark City Hospital and Newark Beth Israel Hospital;  
Assistant Surgeon, New Jersey Rehabilitation Commission.

(Read before the section on Medicine, Academy of Medicine,  
Northern New Jersey, April, 1924.)

The successful rôle played by physiotherapy in the reconstruction and physical rehabilitation of our disabled soldiers and sailors following the World War is a matter of medical and military history. The vast laboratory created by our reconstruction hospitals, the unusual facilities for varied treatment, the comprehensive armamentarium, and the opportunity of studying cases from every angle gave those interested in physiotherapy a chance to apply old methods and experiment with new ones. The hopelessness of some of the disabled, prompted the use of measures that at first glance were considered useless and even harmful, but the reproduction of consistently good results warranted the extension of these same physiotherapeutic modalities. So, too, in the realm of civilian rehabilitation, physiotherapy has assumed a major rôle; so much so that our Rehabilitation Clinics give 5000 treatments every month.

Not the least of the physical agencies which played an im-

portant part in the rehabilitation and reconstruction of the disabled was that of diathermy. Diathermy is not an electric current, but is electricity converted into heat, conversive heat. It has been called thermopenetration, endothermy, etc., but none of these names are correct. Diathermy represents the condition of the tissues that are traversed by a high-frequency current between two poles of a d'Arsonval circuit. You will remember that the difference between direct and alternating current is that the former is unidirectional, flows in one direction, while the latter reverses the direction in which it is flowing a great many times a second. The house current used in this city is known as a 60 cycle alternating current, that is, it reverses itself 120 times a second; a cycle being the time it takes to complete both the positive and negative phase. These alternations are also known as oscillations and their number is spoken of as the frequency.

A great many years ago d'Arsonval found that when the frequency of these alternations or oscillations was raised from 2500 to 5000 per second the contraction of frog's muscle in response to the electric stimulations was considerably diminished, and when 10,000 oscillations per second were reached, no contraction (muscular) ensued. Tesla then found that the passage of a high frequency current 20 to 5000 oscillations per second through animal tissues caused a perceptible rise in the temperature of the tissues traversed. This was explained on the basis of Joules Law; the electric energy being converted into heat by resistance of the tissues to the passage of the current. The heat varies as the square of the amperages. With modern apparatus the frequency has been raised to millions of oscillations per second.

The clinical and experimental researches of Berond, Nagelschmidt, Kowarstchik, Sellbeim, Laqueur and Von Zeynek disclose the following physiologic effects of diathermy:

- (1) The production of an intense deep hypermia.
- (2) Increase of lymph circulation.
- (3) Leukocytosis.
- (4) Antibacterial effect on the virulence of the following microorganisms:
  - (a) Gonococci (results in gonorrheal arthritis were brilliant).
  - (b) Cholera Vibrio.
  - (c) Pneumococcus (thermosensible).
  - (d) Staphylococcus and streptococcus showed no change in virulence.
- (5) Sedative effect.
- (6) Increased activity of organs such as liver, kidney and secreting glands.

The use of diathermy in pneumonia was first suggested by Price, in 1916, and later by Sampson<sup>1</sup> and De Kraft. Stewart<sup>2</sup> first



reported 10 cases treated at the U. S. Marine Hospital No. 21 in 1922. Later, Broeser, of Hoboken, reported remarkable results from the use of diathermy in several cases of lobar pneumonia. The technic was as follows: Two electrodes of 22 gauge Crooke's metal, flexible and easily molded to the body, 4x7 inches in size, were placed, one anterior and the other posterior to the affected lobe. The skin and the electrodes were first soaped with ordinary soap and water. One of the electrodes was kept in place by the weight of the patient's body, and the other was held by an assistant or by the weight of a light sand bag. The electrodes were attached to the two poles of a d'Arsonval high-frequency circuit. The current was gradually increased until 2000 ma. was given. At the end of the treatment, which lasted 29 minutes, the current was gradually turned off. One or two treatments a day were given.

Altogether about 67 cases have been officially reported, although a great many more have been treated. The cases are too few and the time is too early to form any estimate of its permanent therapeutic value, but sufficient data has been collected to indicate that it may become an important adjuvant to the treatment of lobar pneumonia. Diathermy is not recommended as a panacea nor as a specific in pneumonia. It has not shortened the period of illness, in the above series; neither has it prevented the occurrence of relapses. One thing it has definitely done which clearly indicates that it has a positive action on the disease process, and that is that in practically every case temperature fell by lysis. Another thing noted, is that no case was lost where treatment with diathermy was started before the third day.

Of the 67 cases reported, 33 were by Dr. Stewart, 31 by Dr. Broeser and 3 scattered. The youngest patient was 2½ years, the oldest 72, the average 31. In 32 cases, one lobe was involved; in 16 cases, 2 lobes were involved; in 11 cases, 3 lobes were involved; in 4 cases, 4 lobes involved; 2 cases, 5 lobes involved; and, 2 cases entire left lung involved. Of the types of organisms recovered, 40 cases were undetermined, 3 showed a streptococcus origin, the remainder pneumococcus; type I. = 4, type II. = 3, type III. = 3, type IV. = 14. The earliest case that was treated was on the first day, the latest on the tenth, the average being the fourth day. The number of treatments ranged from 2 to 33, and averaged 11. Amount of current employed was usually 2000 ma. and the duration of the treatment was in most cases 20 minutes. In every case that recovered, temperature fell by lysis. Of the 67 patients, 8 died.

Some of the complications were hiccough, tuberculosis, otitis media, empyema and pyuria. The effect on pulse, respiration, temperature and blood pressure were carefully observed. It was found that the pulse rate showed little change after the treatment. Res-

piration showed no marked difference except when relief from pleuritic pain caused more comfortable breathing. The marked change in cyanosis was a constant feature. In almost every case it was diminished. The diathermy treatment did not prevent the extension of disease to neighboring lobes, but when the affected lobes were similarly treated, the patient made a good recovery. In every case the rate of resolution was hastened. There was a perceptible fall in blood pressure both systolic and diastolic. The higher the pressure the greater the fall. Cases of hypotonia were not found to be contraindicated. The body temperature was raised 1.5 to 2.5°.

In regard to the mortality rate, the gross rate in the above 67 cases was 12%. In Stewart's series of 33, all of whom were treated in a hospital, there was a mortality rate of 19.4%. This compares favorably with the average institutional rate (42.9%).

Dr. Brown, of Franklin, informs me in a personal communication that he has treated a series of 12 cases, mostly types II. and III., with a mortality rate of 25%. Those cases are interesting in that they occurred in workers in zinc mines where a great deal of the mineral dust was inhaled and aspirated; the mortality rate in previous years was 50%.

From the above, it may be seen that we have here a potent agency in the treatment of lobar pneumonia. Results are still too few and the time is still too early to pass on its permanent value but the indications are that it will assume an important rôle in the therapy of this disease.

#### REFERENCES

1. Sampson, Chris: *Physiotherapy Technic*, C. V. Mosby Co., 1922.
2. Stewart, Harry E.: *Diathermy in Pneumonia*.
3. Brown, C. R.: Personal communication, Feb., 1923.

Night sinks on the wave,  
Hollow gusts are sighing,  
Sea-birds to their cave  
Through the gloom are flying.  
Oh, should storms come sweeping,  
Thou in Heav'n unsleeping,  
O'er thy children vigil keeping,  
Hear and save.

Stars look o'er the sea,  
Few and sad and shrouded;  
Faith our light must be  
When all else is clouded.  
Thou whose voice came thrilling,  
Wind and billow stilling,  
Speak once more the pray'r fulfilling,  
Pow'r dwell with Thee.

—Hemans.

## Communications.

### LETTER FROM PROGRAM COMMITTEE.

The annual meeting of the Medical Society of New Jersey will be held at Haddon Hall, Atlantic City, New Jersey, on June 18, 19, and 20, 1925, and the Committee on Program and Arrangements, with the approval of Acting President Dr. Lucius F. Donohue, begs to bring this matter forcibly to the attention of all the members of the County Societies, with the hope of largely increasing the attendance.

The attendance at the annual meeting has grown rapidly in the past few years, having reached a total of 900 registrations in 1924. We feel, however, that with the superior program we are going to present at the coming meeting this figure should be largely augmented. We have a number of papers from the leading men of our state, and in addition have been fortunate in securing Dr. John A. Kolmer, of the University of Pennsylvania, to present the Oration in Medicine, and Dr. John Erdmann, of New York, to present the Oration in Surgery. All these features, coupled with a very attractive social program, should make it well worth the while of all our members to attend.

We strongly urge that you all bring your wives with you, as we have planned a very delightful program of entertainment for them. June is really the most attractive month to visit Atlantic City and our meeting offers you an opportunity to combine attendance at the meeting with a very pleasant vacation.

The hotels Haddon Hall and Chalfonte offer very attractive reduced rates during the time of our meeting and our committee urges all who plan to attend to make reservations directly with the hotels as early as possible in advance. The railroads are also coöperating with us by offering special **reduced rates**, full details of which appeared in the March Journal, page 99.

We urge each and every one to attend.

W. D. OLMSTEAD, Secretary,  
Committee on Program and Arrangements.

### FROM BOARD OF MEDICAL EXAMINERS.

Dr. Alexander MacAlister, Secretary, supplies us with the following items of interest:

On April 20, Emery Krausz, M.D., plead guilty to a charge of practicing medicine without a license and paid the penalty in the New Brunswick District Court. Dr. Krausz practiced at Perth Amboy.

On April 18, John Varga plead guilty to a charge of practicing medicine without a license in the Newark District Court and paid the penalty. This was a second offense.

On April 21, Anna Claxton, a saleslady for the Viavi Company in Newark, N. J., was convicted of practicing without a license.

On April 22, Alexander Berg, plead guilty to a charge of practicing medicine without a license in the Trenton District Court. The local paper contains the following: "For practicing medicine without a license the Rev. Alexander Berg, pastor of Christ Lutheran Church, on Livingston Street, was late yesterday afternoon fined \$200. by Judge English in the City District Court. The fine was paid for Mr. Berg by Richard L. Hendrickson, a parishoner.\*\*\* The minister was accused of having given treatments, diagnosed ailments,

prescribed for and treated persons, without holding any license to practice medicine. He admitted the charges.\*\*\* Mr. Berg protested against the law under which he was accused and signified a desire to go to jail rather than pay a fine, but his congregation was reluctant to permit him to do this and put up the \$200. penalty. Mr. Berg later explained that he never sought patients, but that many had come to him seeking treatment. He has been devoting 3 days a week to healing and the rest to his church duties".

### NAMES ADDED TO THE OFFICIAL MEMBERSHIP LIST SINCE THE PUBLICATION APRIL 5, 1925.

Through an error the following names were omitted from the list when it went to print:

Hermann, Wm. G., 601 Mattison Av., Asbury Park. (Published at the head of Monmouth County Society as President, but not carried to the list below).

Sisserson, W. W. 425 Second Av., Westfield.

#### New Members.

Crane, Bernard, 2512 Pacific Av., Atlantic City  
du Busc, L. C. V., 1 Wallace Pl., Newark  
Featherston, D. F., 506 4th Av., Asbury Park  
Ritter, H. R., 14 So. Wyoming Av., Vt'n'r City  
Winn, Samuel L., 1704 Pac. Av., Atlantic City

#### Reinstated Members.

Abrams, A. B., 668 Clinton Av., Newark  
Anderson, V. V., 506 4th Av., Red Bank  
Cassidy, Samuel H., Keyport  
Davis, Bryon G., Galbreath Apts., Atl. City  
Freidrich, A. H., 424 Lafayette St., Newark  
Fink, A. E., 262 High St., Newark  
Hartman, H. W., Keyport  
Hill, J. A., 201 8th Av., Asbury Park  
Haskell, I. D., 387 Fairmount Av., Newark  
Hauch, Lydia B., 644 Stuyvesant Av., Irvington  
Hauch, Wm. H., 644 Stuyvesant Av., Irvington  
Hosp, Paul H., 267 Clinton Av., Newark  
Lewis, Thomas K., 414 Cooper St., Camden  
Jarrett, Harry, 925 Broadway, Camden  
Kain, Thomas M., 622 Cooper St., Camden  
Kelchner, Wm. I., 201 Kenapac Apts., Atl. City  
Lincoln, Jennie S., 53 Church St., Montclair  
MacKenzie, Robert, Asbury Park  
Maher, J. E., Long Branch  
Mayhew, S. Dixon, Wildwood  
Mellen, S. H., 863 Mt. Prospect Av., Newark  
Messinger, S., Chrome  
Miller, W. E., 8th & Mt. Vernon Sts., Camden  
Nash, W. G., 20 Clinton St., Newark  
Perham, H. G., Hasbrouck Heights  
Mutchler, Julia, Dover  
Radin, O. M., 80 Broad St., Elizabeth  
Randall, C. H., 50 3rd Av., Newark  
Reich, A. L., 81 Lyons Av., Newark  
Rodman, R. W., Lyndhurst  
Rothenberg, S., 1 Hillside Av., Newark  
Silcox, H. B., Keyport  
Sherman, A. L., 29 Northfield Av., W. Orange  
Sherman, Bryan G., Ralston  
Stokes, E. B., 1 Whittlesey Av., East Orange  
Wilkinson, Geo. W., High St., Morristown  
Wolf, F. A., Phillipsburg  
Thomson, S. R., 35 Weequahic Av., Newark

There may be some new members in the above list, but they were not so designated by the county officers. Their names are being published without further investigation in order that they may be entitled to register at the A. M. A. meeting at Atlantic City in May.

J. B. Morrison, M.D., Secretary.



# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if.—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, Newark, N. J.

## TESTIMONIALS TO AN ESTEEMED COLLEAGUE.

Only rarely does the medical profession have an opportunity to celebrate so joyous an event as the attainment by one of its members of a fiftieth anniversary of entrance into the scientific world. It is with a great deal of pleasure that we publish in this issue a full report of the Jubilee Dinner and Testimonial tendered to Dr. Edward J. Ill upon his completion of fifty years of active service as a physician and surgeon.

Apparently as vigorous at this point in the race as when leaving the starting post, certainly as youthful in his enthusiasms, Dr. Ill is to be congratulated upon the work accomplished thus far, and we beg to express the hope that he will continue to give the profession the benefit of his wisdom and of his active participation in the further development of organized medicine.

## OUR NEW DRESS.

Upon the advent of Spring all nature begins to stir uneasily, and the most active elements tend to cast off the dull or sadly worn garments of winter and to assume a newer and gayer gown. So, the Journal, taking advantage of the simultaneous appearance of Spring and Easter, and feeling the urge of internal changes, sought permission of the Board of Trustees to put on a new cover. Whether or not it has improved our appearance must be somewhat a matter of personal taste, but we hope the majority of you will like us better for the change and that you will be sufficiently attracted to induce closer investigation and more intimate study of our general make-up.

A new dress usually calls for a new hat, new shoes, and other things; the old story of "living up to Lizzie". Each step of progress suggests other things that might well be done for the benefit of those

who support and read the Journal. Some such things are even now under consideration for adoption at an early date.

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#### COUNTY SOCIETY REPORTS.

It is with pardonable pride that we again call attention to the excellent work of the County Society Reporters. You may recall that in the February issue we directed attention to this feature of the Journal. As we predicted there, it has been found possible to maintain the practice established in that number, and to publish each month a report of every county society meeting held during the preceding month. The May issue contains reports from no less than 16 out of our 21 counties; probably the largest number of such reports ever published in a single number of the Journal. Our best thanks are due, and are here offered, to these reporters for their coöperation in developing this part of the Journal, and especially do we wish to commend them for the character of their reports. It has been good work, well done and we only ask now that it be continued regularly and promptly.

In several of the counties there are independent societies, not connected with the county organization, formed for various local reasons and doing excellent work, and we hope to induce a larger number of these to report their proceedings for publication in the Journal under their respective county headings; just as the Camden City Medical Society and the Atlantic City Hospital Staff have given us this winter very interesting reports of their scientific discussions. Now that the County Society proper is being well cared for, we shall devote some time to bringing these independent societies into association with the Journal and thus disclose to the world the full quantity and the fine quality of scientific work that is being done in this state.

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#### THE ANNUAL MEETING.

Once again, let us remind you of the approaching meeting of the State Society and urge that those of you who have so far neglected to do so shall begin right now to make your preparations for attendance. Elsewhere in this issue, the Secretary of the Program Committee tells something of what is being done for you, and presents a plea for your hearty coöperation. Important things are developing within the organization, announcement of which will be made at the June meeting, and you should be present to hear the reports of your agents and representatives and to participate in shaping the future policies of the Society, as well as to profit by the excellent series of contributions to the science and art of medicine.

In the March issue of the Journal, on page 99, you will find detailed instructions regarding special reduced railroad rates.

Come! Join us on this occasion!

## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

### Hernia.

Recent surgical literature has presented a variety of articles dealing with the general subject of hernia, a subject of such constant import to the physician engaged in general practice that it would seem worth while to devote our space this month to a consideration of several aspects of this particular problem. Robitshek (Minnesota Med., 8:160, March, 1925) calls attention to the fact that because of modern surgical technic and asepsis the operation for radical cure of uncomplicated simple inguinal hernia has come to be too lightly considered by the general surgeon. Entirely too frequently, the surgeon-in-chief disdainfully assigns these operations to the house surgeon or surgical intern who has had but a limited experience at best. Fortunately, the operative technic has been so standardized that it has been reasonably safe and generally successful even in the hands of the novitiate, but, simple as it may seem, this operation is not entirely free from danger. The accidental injury of nerves, large blood-vessels, the spermatic cord, urinary bladder, and hernial sac contents has caused irreparable harm and wrecked not a few lives.

Traumatism of one of the nerves, iliohypogastric, ilio-inguinal or genitocrural, is perhaps the most frequently recorded mishap in hernioplasty, though it is less serious than some of the other surgical accidents. Division of the iliohypogastric causes an area of cutaneous anesthesia surrounding the lower angle of the incision and extending from the level of 7 cm. above the root of the penis to within 1 or 2 cm. of that organ. Division of the ilio-inguinal and genitocrural, which are usually anastomosed into 1 trunk in the inguinal canal, is followed by complete loss of sensation of the entire scrotal contents, cord, hernial sac and testicle, and by a cutaneous area of anesthesia that occupies the inner side of Scarpa's triangle over the abductor tendon. Inclusion of these nerves in the suture produces a very annoying neuralgia which may even require dissection of the scar to free the nerve before relief can be obtained. It is highly important, therefore, to avoid cutting, tearing, bruising, or pinching these nerves during the operation or when closing the wound. Mackechnie pointed out several years ago (Am. Jour. Surg., 36:241, 1922) that pain is the most frequent complaint following inguinal hernioplasty and that it is

generally due to envelopment of the ilio-inguinal nerve in the scar tissue.

Injuries to the blood-vessels or to the sac contents during surgical procedures are even more serious than those inflicted upon the nerves. The deep epigastric and the external iliac are the vessels mainly concerned and they are not infrequently injured by accidental needle puncture when, in suturing the conjoined tendon to Poupart's ligament, the needle is inserted too deeply. Not only has one to fear the immediate effect of such traumatism, but it is more than suspected that some cases of thrombosis of the femoral vein following operations for inguinal hernia are the indirect result of such misadventures; indeed, Robitshek reports having observed one case himself so serious that it resulted in gangrene of the leg and death.

Injury of the spermatic cord, with resulting atrophy of the testicle; injury of the hernial sac contents, and most every abdominal organ has at some time been found in such a sac; and, injury to the urinary bladder, which so commonly lies in direct contact with the hernial sac; have each been reported so frequently as accidental complications of the hernia operation that it calls for constant care on the part of the surgeon to guard against such catastrophies. Many of these accidents would seem to have been almost inexcusable and Robitshek very properly concludes his paper as follows: "Since surgical accidents are, in the main, the result of ignorance, carelessness, misjudgment, defective technic, or a combination of these, it behooves us not to consider this operation too lightly but rather to consider each case separately and to apply the operation best suited to the individual case, to take more time and more pains in order that every source of accident be carefully avoided and the purpose of the operation be successfully attained."

The recurrence of hernia after an apparently satisfactory operation is discussed by Gallie and Le Messurier (Arch. Surg., 9:516, Nov., 1924) and is attributed to failure to bring and hold together the muscular and aponeurotic structures that are needed to form a supporting posterior wall; either the structures are not properly brought into union or they return to their old positions as soon as the sutures have become absorbed. To obviate these failures, these authors recommend the use of free transplants of fascia lata as living sutures permanently to unite the edges of the ring without depending on the natural processes of repair. During the past 4 years they have operated upon 60 patients the majority of whom had been operated upon 1 or more times previously, and there have been no recurrences in this series where the living sutures were employed. The fascia used for this purpose may readily be obtained from the lateral aspect of the patient's thigh, cut into strips of  $\frac{1}{4}$  in. width and threaded into a large-eyed needle.

Goldschmidt (Wien. klin. Wchnschr., 37: 1162, Nov. 6, 1924), reports having adopted as a routine method for treating inguinal hernias in males,—not simply for congenital hernia in children—the procedure devised by Anschutz to avoid the difficulties encountered because of the intimate adhesion of the hernial sac to the structures of the spermatic



cord in children. This method consists of opening the hernial sac, carefully sectioning it transversely from inside at the neck, and then closing the central end with a purse-string suture; the rest of the sac is not dissected loose but is twisted around the spermatic cord and testicle as in Winkelmann's hydrocele operation, and is fixed in this position with a few sutures. It is the most bloodless operation for very adherent hernial sacs and the danger of secondary atrophy of the testicle seems to be overcome.

Frank Harvey has reported a series of 52 cases of femoral hernia treated by Roux's method with very satisfactory results (Lancet, London, 207:1229, Dec. 13, 1924). The operation is said to be simple, efficient and more quickly performed than any other. After the sac has been opened, redundant omentum removed and the bowel returned to the abdominal cavity, the sac is pulled down with moderate tension, twisted to obliterate its lumen and ligated high up. A rectangular staple is then selected and the points passed through the inner portion of Poupart's ligament. The inner limb of the staple passed just internal to the crescentic border of Gimbernat's ligament and the outer limb immediately internal to the common femoral vein. The staple is pressed firmly into the horizontal ramus of the pubic bone, Roux's punch is placed on the staple and the latter is gently hammered into the bone until the crural ring is obliterated.

T. T. Thomas calls attention (Atlantic M. Jour., 28:15, Oct., 1924) to the special danger of strangulation in femoral hernia and explains the frequency of this complication on the basis of anatomic conditions, i. e., the smallness of the ring and the rigidity of its margins. The upper boundary of the ring, Poupart's ligament, is very strong; below, there is the pelvic bone; internally, the sharp edged, very strong, unyielding Gimbernat's ligament. On the outer side, the femoral vein frequently approaches so close to Gimbernat's ligament as to leave no space and consequently no femoral ring. The hernia must push out between these structures but the vein has strong attachments and resists displacement. Consequently, such a hernia is always small and very frequently becomes strangulated if anything more than omentum gets into it.

With reference to the occurrence of rupture of the intestine following strangulation, Hupp (Ann. Surg., 80:504, Oct., 1924) points out the important fact that in dealing with strangulated hernia that has reached the stage of gangrene of the bowel, there are at least 2 mortality factors to be considered in addition to shock: (1) The possibility of an intraabdominal leak, due to partial or complete rupture at the point of constriction from partial necrosis; and, (2) ulceration of the gut leading to postoperative perforation.

A rare case of incarceration of the bladder in the femoral ring is related by Laskownicki (J. d'urol. med. et, chir., Paris, 18:251, Sept., 1924) in which an elderly woman presented symptoms that seemed to indicate a strangulated epiplocele or partially strangulated intestinal hernia in the femoral ring. After incision of the skin, a tumor having the appearance of a hernial sac was laid bare and cut

open. Yellow fluid spurted out and it was only after close examination that the surgeon discovered the tumor to have been a distended bladder; the real hernial sac, which was small and empty was found beside the bladder. It appears that 7 similar cases have been reported in surgical literature, the correct diagnosis not having been made in any one of them.

Reichenbach recently reported (Munch. Med. Wchnschr., 71:1542, Oct. 31, 1924), a case of gangrenous appendicitis associated with a left sided inguinal hernia, which was possibly explainable on the ground of an anomaly in fetal migration of the cecum. The diagnosis of inflamed hernia was made because the sac was greatly distended by fluid, the disturbance had persisted for 4 days, with good general condition, the pain was slight and the passage of stools and flatus was not disturbed. The true cause of the inflammation, the gangrenous appendix, was not recognized. Naturally, diagnosis would be difficult in such a rare condition but it is possible that the circumscribed pronounced tenderness, such as was noted in this case at precisely the place where the appendix was later discovered during operation, might be utilized diagnostically if the complication were suspected.

In contradistinction to this error of mistaking the appendix for a hernia, Haines (Med. J. & Rec., 121:101, Jan. 21, 1925) states that some cases diagnosed as chronic appendicitis, especially some of those that are not benefited by appendectomy, may really be cases of beginning oblique hernia. He thinks that sufficient emphasis has not been placed upon the diagnosis of this condition, upon the symptoms of pain or discomfort located over the internal ring. This pain is usually increased by any movement of the trunk on the pelvis, or by coughing, while it is generally relieved by lying upon the back. The possibility of hernia should be considered in all cases of lower abdominal pain not readily explained on some other basis, and it is well to remember that a thorough history and great care in physical examination are often required to establish the diagnosis of beginning oblique inguinal hernia.

Mother: How did you persuade daughter to undergo that nasal operation?

Father: I told her it would improve her ability to inhale.

—Life.

#### Analytical

People who talk of wine and beer as alcohol might just as well invite their aunts to visit them at four o'clock for a cup of tannin.—London Daily Express.

Most Natural.—"Did he die a natural death?"

"Yes, he was run over in the street."—Kansas City Star.

In Reverse.—"I want a loaf of bread, please."  
"You are a penny short. The price has gone up since yesterday."

"Then give me one of yesterday's loaves."—Klods Hans (Copenhagen).

## County Society Reports

### ATLANTIC COUNTY.

J. H. Marcus, M.D., Reporter.

The stated monthly meeting of the Atlantic County Medical Society was held at the Hotel Chalfonte, on the evening of April 17, 1925. The meeting was called to order by Dr. D. Ward Scanlan, president. The minutes of the previous meeting were read and approved.

Dr. W. Blair Stewart, reporting for the Legislative Committee, stated that the act which was to control the use of "M.D." and "Dr." did not pass final reading in the assembly and is therefore held in abeyance for the time. Dr. Stewart transmitted a message from Dr. W. D. Olmstead in which he stressed the urge for all members of the Atlantic County Medical Society to pay their dues and to register at the State Meeting as well as at the sessions of the American Medical Association. Referring to the broadcasting of health talks, mentioned at a prior meeting, Dr. Stewart stated that the program would be inaugurated during the late spring and early summer, discontinuing proceedings in the summer months and then resuming again in October. The Board of Censors reported favorably on the admittance of Dr. H. Rarig, of Hammonton, and moved that he be elected to membership in the County Society.

Dr. Scanlan stated that a message had been received from the State Society containing the proposed changes in the By-Laws and Constitution. Dr. Edgar Darnall moved that this matter be referred to the Delegation to the State Society, which motion was properly seconded and adopted. An application was read from Dr. S. Stalberg requesting transference of his membership from the Academy of Medicine of Cleveland. An application for membership to the County Medical Society was received from Dr. D. C. Reyner, of Atlantic City.

The Scientific Program was opened by Dr. John H. Stokes, Professor of Dermatology and Syphilology, University of Pennsylvania. (Formerly of the Mayo Clinic). His topic was "Lesions of the Mucus Membranes", with a lantern slide demonstration. Prior to his descriptive case reports, Dr. Stokes emphasized the necessity of examining the skin in its entirety and presented a vivid picturization of the manifold lesions of the skin. In the differential diagnosis, significance was placed upon careful routine examination with a complete history. In considering epithelioma, he stated that age is a negative factor in arriving at a conclusive diagnosis. Nonspecific pemphigus was mentioned as a lesion presenting diagnostic difficulty and Dr. Stokes stated that it is important to bear in mind that one causative factor of these lesions may be medication with Veronal and Luminol.

Dr. William Roop opened the discussion with a case report embodying a transmission of a syphilitic infection at a children's party, in which 12 children were infected by contact through one child who had an open lesion. The pertinent question of educating the public was stressed and patients with mucous patches should be warned against the calamitous results of contact. Dr. Roop felt that

most physicians realized the importance of a thorough examination of the patient but spoke of the impracticability of a complete examination of many female patients.

The discussion was continued by Dr. W. J. Carrington who, in closing, affirmed that these intense and lucid portrayals of skin lesions were presented in a masterly fashion.

Dr. George Draper, Associate Professor of Medicine, Columbia University, read a paper on "Observation of the Relation of Human Constitution to Disease, with Lantern Slide Demonstration". The studies and conclusions drawn from Dr. Draper's subject were the end-results of research work performed at the Constitution Clinic of the Presbyterian Hospital of New York City. The author's interest in this subject was aroused some years ago by the apparent selective attitude of disease. In a delightful and scientific preamble Dr. Draper detailed the theories of the process of evolution, emphasizing and portraying the atavistic tendencies in certain types studied by him. As a basis for his work he divides the study of mankind into 4 panels of personality designating this the panel study of man. These phases of the human individual comprise (1) Anatomy, (2) Psychology, (3) Immunity, (4) Physiology.

In formulating a classification for a method of study in comparing the new with the past or old standards, the following basic division was made: (1) Application of the new or unknown to the old standards. (2) Inter-group comparison by botanic or zoölogic anthropology. These principles form the basic elements for the evolution of the anthropometric phase of study, attempting to find a standard or a normal measurement applicable to individuals who acquire certain types of disease. As demonstrated later in the course of his lecture, Draper tabulates certain measures of the human skeleton which specific measurements paved the way in the differential diagnosis between gastric ulcer and gall-bladder disease, feeling that the capacity of developing disease is embodied in the individual demonstrable by skeletal anthropology. A table was presented showing the comparative average figures demonstrating the different body measurements between patients with gastric ulcer and those with gall-bladder disease.

In discussing Dr. Draper's presentation, Dr. Robert Kilduffe spoke of the failure of the clinician to use other facilities besides those of a clinical nature in the examination of patients, remarking that both papers presented here impressed upon him the great importance of keen observation and the diligent and consistent application of routine examinations. Drs. Clarence Andrews and W. Blair Stewart emphasized the importance of observing both facial and body characteristics in physically examining the patient. Dr. Stokes stated that Dr. Draper's paper comprised a distinctive contribution toward rational application of aspect of disease. He felt that the subject of congenital disease, especially syphilis, embodied either a disease germ plasm or a direct transmission of the organism to the tissue.

Dr. Draper in closing, emphasized caution in the too rigorous method of precision; that one must possess an inherent quality to feel



and to understand environment even without the basis of knowledge. Intuition was a great stimulant to further study and the seeking of knowledge in unknown channels. He feels that the best contribution depends upon that quality that one feels and which unfortunately cannot be explained at that time.

Dr. Clarence Andrews, the Chairman of the Committee on Arrangements for the annual session of the American Medical Association, outlined the program of activities to be undertaken. Among other items of importance, he urged the members to coöperate with Dr. Richard Bew who is in charge of the demonstration clinics to be held by various men of prominence, and asked that they contribute whatever suitable material they may find available for practical demonstration purposes. An appreciative vote of thanks was tendered by President D. W. Scanlan, to Doctors Stokes and Draper, for their contributions.

#### Atlantic City Hospital Staff Meeting.

Joseph H. Marcus, M.D., Reporter.

The stated monthly meeting of the Atlantic City Hospital Staff was held at the Hotel Breakers on the evening of March 13, 1925, being called to order by Dr. W. C. Wescott, President.

Following reports of the standing committees, Dr. D. Ward Scanlan, President of the County Medical Society, asked for the privilege of extending the usual date of the monthly meeting so that it might be held one week later, the Easter Holidays interfering with the stipulated date of April 10. Dr. Walt P. Conway moved that the next meeting of the staff be held on April 24 and that the requested courtesy be extended to Dr. Scanlan. This motion was duly adopted.

**Scientific Program.**—Dr. C. H. Shivers, in reporting for the cystoscopic service, announced the comparative number of examinations made by him and his associate, Dr. C. L. Bossert, as follows: 1922, 30 examinations; 1923, 50 examinations; and in 1924, 74 examinations. Of these 74 examinations, 36 were private and 38 ward patients. It is of sufficient importance to declare that not one case was recommended for a nephrectomy for tuberculosis of the kidney. Dr. Shivers stated that it was rather poor policy to conclude that a kidney is damaged simply because one examination effects a low output due to the inability of the catheter to drain; it may be on account of being blocked by a plug of mucus or similar substance.

At present, cystoscopy is performed in the x-ray room whereas formerly this examination was conducted in the operating room, and then the patient was moved to the x-ray department, 3 floors below. The innovation of performing the entire unit of examination in 1 room decreases opportunity for infection. Commenting on stricture of the ureter, Dr. Shivers stated that many were of the spasmodic type; that both ureteral orifices may be spasmodic and it is advisable to delay passing the catheter until this spasm has been relieved, as it is not due to a pathologic cause. He further urged a greater frequency in referring cases for cystoscopic study and said there should be an increase of 100% in the number of cases referred for examination.

The following case reports embraced elements of considerable interest:

**Case 1.** Captain R. sustained a spinal injury, causing paralysis which involved the lower lumbar region. It was necessary to catheterize constantly in order to empty the bladder. He shortly developed pain, temperature and chills, the pain being in the lumbar region. Cystoscopy revealed crusts in the bladder, and suprapubic cystotomy was performed for their removal. Two months later the crusts reformed, and the bladder was reopened and these excrescences removed under direct vision; 30 c.c. of purulent urine being removed at the same time by siphonage. While under observation, this patient was cystoscoped 62 times after healing of the wound. Patient subsequently developed some infection in each kidney but retained normal kidney function with the passing of small kidney stones of the soft type, of which 5 to 6 were removed each week. When last heard from the patient was receiving irrigations twice a day, followed by instillation of a germicide.

**Case 2.** The outstanding feature was acute abdominal pain with tumor in the right kidney region; among other findings, high temperature with a clear urine. Cystoscopy revealed a large plug of mucus at the right ureteral orifice. Catheter was allowed to remain in for 2 days in order to drain, after which lapse of time the function of kidney was regained. In considering draining the kidney, Shivers maintained that it is always important to bear in mind a mechanical cause of obstruction. In considering vesical irritability in the female, it is always advisable to eliminate tuberculosis, stone or hyperacute cystitis, but of equal importance to keep in mind some of the extravasical causes, one such exciting factor being pelvic infection with adhesions. Treating the extraneous cause is the obvious procedure in this type but irrigation is advised, with the instillation of a germicide, in treating vesical irritability of primary origin.

**Case 3.** A case of severe ureteral colic in an adult male. Cystoscopy revealed an edema of the orifice with a stone in the lower ureter situated under the mucosa. Stone was passed, edema disappeared but left considerable capillary congestion.

The following 3 cases of carcinoma of the penis were presented with exhibition of the pathologic specimens:

**Case (1)** Patient aged 53 years, colored, had a perineal sinus of 9 years' duration with spontaneous rupture due to stricture. Operation performed 6 years ago entailed an external urethrotomy with suprapubic cystotomy. Early history disclosed a warty excrescence on the glans about 5 years ago, with a long and constricted prepuce. The warty growth became ulcerated and soon encircled the glans, involving the entire organ. A clinical diagnosis of squamous epithelioma was made. Patient refused operation but returned 3 months later with the entire shaft destroyed, and urinating through a perineal sinus. Operation performed was a penilectomy. When last seen, patient was progressing satisfactorily.

**Case (2)** This patient, colored, and 45 years of age, presented a phimosis with ul-



ceration around the prepuce accompanied by a foul discharge. Operation performed was that of partial amputation. Diagnosis was squamous epithelioma.

Case (3) A colored man, aged 24, had been circumcised 2 years prior to admittance. At time of admission he presented a small, knotty growth around the scar. Ulceration commenced at this point and when first seen the entire corpora cavernosa was involved. Operation of bilateral inguinal adenectomy with penisectomy was performed.

In the differential diagnosis of these 3 cases syphilis and inguinal granuloma were considered. In syphilis, the gumma usually presents itself in the corpora cavernosa before breaking down; and in the latter condition there is presented a thin fluid with healthy granuloma tissue and not undermined ulcers with unhealthy tissue. In luetic differential diagnosis antisyphilitic treatment is of importance.

In the discussion that followed, Dr. Walt P. Conaway discussed carcinoma of the clitoris and of the vulva, cases of which had come under his observation. Dr. Charles Bossert mentioned a series of 59 cases of carcinoma of the penis, of which number 42 disclosed a history of long phimotic adhesions. Dr. Edward Uzzell mentioned a patient 70 years of age, on whom a penisectomy was performed for carcinoma and 8 months later the growth had returned to its original size; the patient died shortly afterward. Dr. James H. Mason spoke of a similar carcinomatous growth which was removed by Dr. Silvers. Dr. Richard Bew, discussing urinary disturbances in the female, referred to a case in which no pelvic complication existed being treated with irrigations of silver nitrate. Irritability returned and no benefit was derived from these germicidal instillations. It was suggested that dilatation of the urethra might prove of benefit.

Dr. Clarence Andrews, in speaking of the formation of stones, discussed a patient who was more or less constantly manufacturing and passing stones. Dr. Andrews entertained the thought that diet and distilled water may bear a direct relationship in the prophylaxis of the causative factor that produces stones, and thought it well to keep in mind the fact that the mineral constituents may be the initial irritating factor in generating stones. Dr. William Wescott was doubtful as to which was the primary factor in creating stones and spoke of the advisability of using the new antiseptic hexylresorcinol as advised by Young, of Baltimore. Dr. Theodore Senseman presented a case report of an adult male having 4 or 5 sinuses with stricture. In attempting to pass the catheter a great deal of difficulty was encountered and, after finally passing, it was held in place firmly and became covered with incrustated material. It was finally removed with some difficulty, after which graduated metal catheters were used. No stone formation was demonstrable.

Dr. Shivers, in closing the discussion, stated that negligible results were obtained from treatment based on the supposition that special waters and diets influenced formation of stones in the genito-urinary tract, and whatever beneficial terminations were obtained were of a coincidental nature. He further

stated that hexylresorcinol has not been experimented with generally in order to derive positive assertions as to its profitable uses. Lastly, Dr. Shivers mentioned that Barringer recommended the application of x-rays for glandular enlargement but if there is no subsidence in their growth these inguinal glands should be removed. The crusts in the bladder, as typified by Dr. Senseman's case, are not an infrequent occurrence.

Dr. H. T. Harvey made a motion that Dr. Robert A. Kilduffe be elected a member of the staff with the title of Director of Laboratories; motion was properly seconded and adopted. Dr. Harvey further said he entertained no doubt as to the successful administration of this phase of hospital activities and suggested that staff members bring to the attention of their outside colleagues the excellent opportunity afforded for obtaining laboratory diagnoses under exceptionally competent supervision.

Dr. Richard Bew expressed the feeling that Dr. Harvey is deserving of considerable credit for securing Dr. Kilduffe's services, and that Dr. Harvey should be appointed to the position of Director of the Pathologic Laboratory. The motion was adopted.

#### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular meeting of the Bergen County Medical Society was held on the evening of Tuesday, April 14, at the Hackensack Hospital, with 55 members and guests present.

Dr. Bell reported on his visit to the legislature in behalf of Senate Bill No. 132, and asked that Dr. Reik be invited to report to the Society in detail concerning efforts to pass that bill. Dr. Reik recounted the experiences of the Welfare Committee during the recent session of the legislature and described the course of the bill from the moment of its introduction to its final suppression in the Judiciary Committee of the House of Assembly. Inasmuch as Dr. McBride, Chairman of the Welfare Committee of the State Society, had found it impossible to attend this meeting, Dr. Reik spoke for Dr. McBride and the Welfare Committee in recommending that the County Society take definite action to show the displeasure of the medical profession at the conduct of Mr. Chandless, one of the representatives from Bergen County and Chairman of the Judiciary Committee.

At the conclusion of this discussion, the Chair announced that an excellent scientific program had been prepared for this evening, and, inasmuch as there would be a special meeting of the County Society Tuesday evening, April 28, to discuss business matters, especially the suggested revision of the Society's Constitution and By-Laws, action upon the matter under consideration could be better taken up at that time when there would be a better opportunity for deliberation.

The privileges of the floor were then extended to Dr. R. J. Hubbard, who had recently come from Ohio to become a resident of Hackensack.

Resolutions upon the death of Dr. Duffy were presented and adopted.

Dr. Freeland then introduced Dr. George Piersol, of Philadelphia, who presented an

excellent discourse on "Angina Pectoris". Discussion of this topic was opened, for the medical side, by Dr. Samuel A. Brown, New York City, and by Dr. John McCoy, of Paterson, for the surgeons. An interesting point in Dr. McCoy's summary was the statement that as yet the results of surgical intervention in this disease have not been very encouraging.

It was announced that, in addition to the regular monthly meeting, the Society would hold a special meeting May 20, in conjunction with the Society of Rockland County, of New York; this special meeting to be held at the Lederle Laboratories, at Pearl River, New York, and the program to start at 2:30 p. m., and an early supper to be served so that those attending the meeting may return home in time for their evening office hours.

### BURLINGTON COUNTY.

R. I. Downs, M.D., Reporter.

The Burlington County Medical Society met at "Fairview", the Tuberculosis Sanatorium at New Lisbon, on Wednesday, April 8. In the absence of Dr. Longsdorf, Dr. Downs presided. There were 28 members and guests present, the Board of Managers of the Sanatorium being represented by Mr. Charles E. Joyce and Mr. and Mrs. Warren C. Pine, and the State Board of Health by Dr. Costill and Mr. Merrill.

The minutes of the previous meeting having been approved, the following new members were elected: H. C. Curtis, of Moorestown; J. W. Brice, of Riverside; R. N. Blake, of Mt. Holly; and, Schmerl Seidenberg, of Brown's Mills. Dr. Rogers, of Riverton, spoke briefly upon the subject of local coöperation and loyalty among Doctors in their respective communities.

Dr. Metzger, of Riverside, presented, as the speaker of the day, Dr. Herradora, of Hudson County, who exhibited 6 reels of motion pictures on the "Diagnosis of Pulmonary Tuberculosis" and gave a successful clinical demonstration of the pneumothorax treatment.

The Board of Freeholders provided a very fine dinner, which was followed by a highly satisfactory inspection of the institution.

### Camden City Medical Society.

Henry B. Decker, M.D., Secretary.

The monthly meeting of the Camden City Medical Society was held on April 7. Dr. Randle C. Rosenberger, Professor of Bacteriology and Preventive Medicine, Jefferson Medical College, spoke on the "Bacteriology and Prophylaxis of Lobar Pneumonia".

Dr. Rosenberger gave a brief, clear description of the lung changes in lobar pneumonia and enumerated the bacteria which cause this condition. He spoke particularly of the pneumococcus, reviewed its history, described its morphology, and its various strains or types. He discussed the production of antipneumococcal sera and their use in treating lobar pneumonia due to pneumococci of types I. and II., and felt that the antimicrobial serum was a valuable aid but that it should not displace other therapeutic measures. In prevention of the disease, he considered personal hygiene, control of the droplet spray when coughing, treatment of the common cold, and partial

isolation of the infected patient as the most important measures. Active immunization by the use of pneumococcus vaccine is apparently successful in certain parts of South Africa but not yet practicable in this country.

The paper was interesting and instructive, and it was discussed by a number of the members present. As Dr. Rosenberger had taught many of the members of the society, several in their discussion, recalled their student days more or less humorously.

The question of the small-pox epidemic was incidentally taken up, and Dr. Stone, Director of Health in Camden, told of the efforts of the health department to control it. The plan of quarantine followed is that approved by the United States Public Health Service. Apparently the epidemic is increasing in Camden and in Philadelphia. Several of the members spoke bitterly about the methods of the Camden Health Department, and expressed the feeling that more strenuous methods should be used to enforce vaccination of individuals. One member spoke so forcefully that the usual calm of the Society was somewhat disturbed.

### CAPE MAY COUNTY.

Eugene Way, M.D., Reporter.

The Spring meeting of the Cape May County Society was held on Tuesday, April 21, at Egg Harbor Inn, Beesley's Point, under the presidency of Col. Charles L. Gandy, U. S. Army Medical Corps, retired. The minutes of the previous meeting were read and approved. There was a very good attendance of the members, most of whom were accompanied by their wives, and at the conclusion of the scientific and business portions of the program, dinner was served to about 40 members and guests.

Dr. Henry O. Reik, Editor of the State Society Journal, made his first appearance before this organization and explained in detail the plans developing under direction of the State Society officers and special committees for public education in medical matters, for postgraduate study within the profession, and for closer association between the State and County societies.

Dr. Philip Marvel, Jr., delivered a very interesting and instructive address on the "Diagnosis and Treatment of Angina Pectoris". Particular stress was laid upon the importance of recognizing abdominal symptoms that are often associated with or precede the anginal attacks.

The paper was discussed by Drs. Glendon, Way, Haines and Reik.

### CUMBERLAND COUNTY.

E. S. Corson, M.D., Reporter.

The Society met at the Hotel Cumberland on Tuesday, April 7, with a good attendance, Dr. E. C. Lyon presiding. The finances of the Society are in good condition. The increase in membership enables the appointment of an additional annual delegate to the State Society and Dr. H. E. Lore, Cedarville, was appointed. Former Judge LeRoy W. Loder gave a valuable talk on Medical Jurisprudence and he was requested to permit the address to be published in the State Medical Journal.



Dr. Lucius Donohoe, acting President of the State Medical Society, gave a very interesting address on "Medical Ethics".

Dr. J. Bennett Morrison, Recording Secretary of the State Society, spoke on Medical Welfare Work.

The presence of these officers and their having come from so long a distance was doubly appreciated. Visitors were present from several other county societies.

#### ESSEX COUNTY.

Alfred Stahl, M.D., F.A.C.S., Reporter.

The stated meeting of the Academy of Medicine of Northern New Jersey was held Wednesday evening, April 15, at Newark. Dr. Jay Frank Schamberg, Professor of Dermatology and Syphilology, Graduate School of Medicine, University of Pennsylvania, read a paper on "The Cutaneous Manifestations of Syphilis and Their Differentiation from Other Skin Diseases, with a Resumé of Modern Treatment". Lantern slides showing the various stages of syphilis and differential diagnosis from other skin diseases were presented in a way to simplify and make this difficult subject more easy of comprehension. Dr. Schamberg emphasized the importance of treating the later stages of syphilis with one-tenth dose of the arsenicals, bismuth and mercury, as usually employed in the early stages.

The following officers were unanimously elected: President: E. Zeh Hawkes. Vice-President: Samuel A. Cosgrove. Recording Secretary: Emanuel D. Newman. Corresponding Secretary: Richard J. Brown. Treasurer: Henry C. Barkhorn. Trustees: (for 5 years) Charles L. Ill and Henry J. F. Wallhauser. Committee on Admissions: Royal A. Schaaf. Committee on Library: George J. Holmes. Fellows: Sidney S. Jedel, D.D.S., and J. Morris Atchason, D.D.S.

The Eye, Ear, Nose and Throat Section held its regular monthly meeting April 14, 1925. The members presented numerous interesting clinical cases. Dr. William O'G. Quimby was elected chairman, and Dr. Lee W. Hughes, secretary of the section for the ensuing year.

#### GLOUCESTER COUNTY.

Henry B. Diverty, M.D., Reporter.

The Gloucester County Medical Society met at the Woodbury Country Club on Thursday evening, April 16, the members present being: Drs. Stout, of Wenonah; Knight, Lummis and Philips, of Pitman; Fisler, of Clayton; Downs, of Swedesboro; Ashcraft, of Mullica Hill; Ulmer, of Gibbstown; Wood and Sinxon, of Paulsboro; Hunter, of Westville; William Brewer, Underwood, W. H. Carpenter, A. R. Carpenter, Davenport, Campbell, Sickel and Diverty, of Woodbury.

Flowers were ordered to be sent to Drs. Hillegass, of Mantua, and Hollinshed, of Westville, both of whom were detained at home by illness.

The address of the evening was delivered by Dr. Orlando H. Petty, upon the subject of diabetes, and the discussion was opened by Dr. E. S. Dillon. Drs. Cannon and Wilson were present as delegates from Salem County.

The next meeting of the Society will be

held at Margate Park, Atlantic City, May 21, when the Society will be the guest of Dr. Madeleine A. Hallowell.

#### HUDSON COUNTY.

William Freile, M.D., F.A.C.S., Reporter.

This Society assembled on April 7, at the Nurses' Auditorium, Jersey City Hospital, Dr. E. J. Luippold, presiding.

Dr. Arthur P. Hasking, chairman of the Revision Committee, stated that in going over the old constitution and by-laws, several were found to be verbose and some immaterial. These were either boiled down or omitted. The growth of the Society and the quantity of routine business to be transacted, had cut the scientific sessions short. It was now proposed to refer these business matters to the various committees, who would discuss the projects and make their recommendations to the Society, and by thus concurring with the reports of the Executive Committee, or rejecting or amending them, much lost time and motion will be obviated.

After the second reading, with a few minor alterations, the new Constitution and By-Laws (as published in the April "Bulletin"), were adopted. Dr. Hasking was voted the thanks of the Society for the completion of a task which had entailed considerable thought and a good deal of time.

President Luippold introduced Dr. Charles A. Elsberg, Mt. Sinai Hospital, New York City, who spoke on "Experience in Diagnosis and Surgical Treatment of Tumors of the Brain". He thought a presentation of some of the newer methods, recently used in the diagnosis of these conditions, would be timely, as the future of surgical treatment depended to a great extent on the early recognition of the presence of a brain tumor, and unfortunately with a paucity of symptoms an extensive new growth could be present in the cranial cavity. Neurologic diagnosis must advance faster in the future as it is now only in the early state of infiltrating brain tumors that they can be radically excised with any reasonable success. About 1½ years ago he had examined all the brains in their collection, containing infiltrating tumors, and there was not a single instance in which the growth could have been excised without destroying a large portion of the brain and going across the median line. The removal of entire lobes, as recently advocated by one surgeon, has not shown results to warrant this procedure.

The first lantern slide projected showed the system of vessels between the two tables of the skull in the normal individual. In certain brain tumors, especially in endothelioma, the x-rays show an enlargement of the diploic channels, and with this as an aid to early diagnosis, a large percentage of these tumors can be satisfactorily removed. If this enlargement of the diploic channels exists only on one side with some neurologic symptoms, it speaks for pathology. If on both sides without symptoms, it may have no significance.

The next picture demonstrated that convolitional atrophy—erosion of the table of the skull—usually begins in the frontal region and extends backwards; it is found in 75% of cases with brain tumor and sometimes means



cerebellar disease. There are 2 types of this atrophy. In one the areas representing the convolutions are rather heavy in their outline; this usually indicating a fresh atrophy, causing an obstructive hydrocephalus. In individuals with hydrocephalus since infancy, the ventricles are more greatly disturbed.

A patient, supposed for 8 years to have an osteoma of the skull, exhibited no symptoms except slight stiffness at times in the left arm. X-rays showed typical cranial hyperostosis. At operation, under local anesthesia, a temporal lobe endothelioma was found and removed. In this case, the tumor had grown outside the dura and decompressed itself until it became too large.

A case with erosion of the skull was suspected of being an endothelioma, but the man was found to have a carcinoma of the prostate and a section from the intracranial tumor showed a metastatic carcinoma.

One patient complained of ringing sounds in the right ear and increasing deafness in both ears; attacks of asphyxia; Babinski on right side; normal fundi; endothelioma removed from left temporal lobe; still well after 7 years.

A young girl complained of headaches and rapidly advancing choked disks; slight enlargement of blind spots; numbness of right side of face. Upon investigating the second branch of the fifth nerve, a large endothelioma was found and successfully removed under local anesthesia.

A man with 4 plus Wassermann had epileptic attacks for years; developed status epilepticus; a well encapsulated brain tumor was removed, and a piece of muscle from the thigh taken to fill the cavity; no attacks for one year, then recurrence, reoperation showed the piece of muscle (which usually disappears) practically unchanged, and examination thereof disclosed the presence of the spirochetes. Since then well.

An individual with signs referable to base of right temporal lobe; removed an endothelioma; few months later began to lose flesh; neurologic examination negative; post-mortem 6 months later revealed a cerebellar and 2 small frontal lobe tumors that had given no definite signs.

The next picture illustrated the erosion caused by a cholesteatoma; a typical picture of a dermoid lying outside the dura. A dozen other slides depicted the diversities of infiltrating tumors.

The speaker then referred to air injections into the ventricles as an aid in diagnosis. By this means, a tumor could sometimes be located within the ventricle when no other evidence thereof would be conclusive. He stressed the point that the air injection of the ventricle for diagnostic purposes should only be done when absolutely necessary, as the procedure carried a mortality of 7 to 10%, although the air is removed as soon as the x-ray has been taken. The patients become stuporous and die. We do not know why.

Dr. Hasking asked for information as to the ultimate results in some of the cases of extensive tumors, particularly those in the lateral ventricle.

Dr. Jaffin was anxious to know what to

look for, aside from convolutional atrophy and enlarged veins, in cases complaining of headache, and suspicious cerebral lesion. He cited a case of this kind, where he thought the patient, a boy, had some peculiar post-encephalitic condition, and who died the next day probably from bulbar paralysis.

Dr. Donald Miner thought that even although Dr. Elsberg was not so very far away there should be some one in every community to follow along and hold himself available for this special kind of work.

Dr. H. J. Perlberg regretted he had missed the greater part of the paper. He had heard Dr. Walter Dandy, of Baltimore, about a year ago on the use of air for the localization of tumors. At that time he did not speak of the high mortality, and he injected the air quite low in the occipital region, whereas Dr. Elsberg's injections were high. He asked if the location had any relation to the mortality. In Dr. Perlberg's experience the x-rays were not of great help in the diagnosis of brain tumors.

Dr. Elsberg, in closing, detailed the technic and its dangers. The air should get into the posterior horn and it made no difference whether the trephine hole was high up or low down. He thought that some of the statistics did not include the series of Dr. Dandy who had devised the air method. The speaker had 4 deaths in about 200 injections. He was convinced that 7 to 10% was about correct. He detailed the results in several cases where intraventricular tumors were removed. He was inclined to class all persons with headaches, in which no other explanation can be given, as brain tumor suspects; they should be carefully studied for sinuses, thickening of the bone, and changes in the sella. He referred to the headache from excessive cigarette smoking; if the habit was stopped the patient would improve in a few months, but not at once. There are many conditions in which the roentgenogram of the skull fails to show any changes.

The minutes as published in the "Bulletin" were approved.

Dr. Jaffin, of the Committee on Public Health, made a preliminary report that it was the sense of the committee that the periodic health examination should be inaugurated, beginning with the committee itself and endeavoring to standardize the methods before presenting them to the Society. He referred to the A and B forms of the A. M. A., and detailed his idea of how to get the movement going.

Dr. Henry Spence stated that a matter had been brought to the State Board of Councilors. Dr. Frank Bowyer, a member of this Society, had been sued, the allegation being that he had produced a bone lesion in a child. This case was so flagrant, without any medical testimony to support it, that a non-suit was directed, but it is nevertheless a crime to bring a charge against a man and make him spend his time and money in defending it. He felt that some steps should be taken to bring the matter to the notice of the Bar Association and moved that a committee be appointed to that end.

Dr. John H. Jantz, 40 Lincoln Street, was proposed for membership.

**HUNTERDON COUNTY.**

Leon T. Salmon, M.D., Secretary.

The regular semi-annual meeting of Hunterdon County Medical Society was held in the Court House at Flemington, Dr. A. H. Coleman, of Clinton, presiding. Dr. L. C. Hamilton, Lambertville, was unanimously elected to membership.

The secretary announced that, as a substitute for the usual program, he was submitting a new plan of procedure, as a matter of trial, and had indicated to several members that they would be called upon to present 5 minute talks on certain selected subjects. An extremely interesting and instructive session followed as the members in response to call spoke upon these topics: Dr. Francis A. Apgar, spoke on "Changing Medical Aspects", comparing conditions today with those of 40 years ago; Dr. Edward W. Closson, on "Hydrophobia", reported a series of cases recently resulting from a rabid dog running wild; Dr. Samuel B. English, on the subject of "Home Treatment of Tuberculosis"; Dr. Theodore B. Fulper spoke of "The Supply and Demand for Physicians in Rural Districts"; Dr. G. B. Tompkins related experiences with regard to "Legal Responsibility in Dealing with Fractures"; Dr. I. T. Topkins, "The Few Drugs I Use"; Dr. B. C. Fuhrmann, "The Automobile as an Aid in Practice"; Dr. Louis C. Williams, "Medical Ethics".

Dr. George N. Sommer, of Trenton, present as a guest from Mercer County Society, opened discussion upon these several dissertations and added a number of interesting points concerning recent developments in the field of surgery.

Dr. Henry O. Reik, editor of the Journal, presented a brief report upon the progress of work in the State Society and urged all the members present to attend the coming annual meeting in Atlantic City. Dr. Reik further outlined work of his office for the next few months, stated his readiness to lecture before public gatherings in the county upon medical subjects of interest to the general public, and asked the Society to make arrangements particularly for 2 lectures on periodic health examinations; one of these talks to be limited to members of the medical profession and to be in the nature of a demonstration as to how the examinations shall be conducted, and the other to be given to the public at some meeting under the auspices of the County Society with the object of instructing the public as to the necessity for these examinations and for having them made by the family physicians.

The president and secretary of the Society agreed to arrange for such meetings at an early date.

**MERCER COUNTY.**

A. Dunbar Hutchinson, M.D., Secretary.

The Mercer County Medical Society met at the Carteret Club, Trenton, April 8, Dr. D. L. Hagerty presiding. Following the reading of the minutes, the President introduced Dr. Joseph Sailer, of Philadelphia, who delivered an address upon "Physical Examination of the Heart, with the Treatment of Cardiac De-

compensation". Dr. Sailer gave a very interesting resumé of our knowledge of the history of heart disease, particularly describing the instruments used and the progress made in training the ear for a study of cardiac phenomena.

Resolutions upon the death of Dr. George H. Franklin were read and adopted, the Secretary was authorized to record them in the minutes and to send a copy to the family of the deceased.

Drs. Chianese, Seitzick and Traub were elected to active membership. Dr. William L. Wilbur, of Hightstown, was elected as a Permanent Delegate to fill the vacancy caused by the death of Dr. Franklin. A communication from the President of the Monmouth County Medical Society, proposing a joint meeting of the Mercer and Middlesex County organizations, was referred to the Program Committee for action.

Following adjournment, about 40 members partook of a delightful luncheon.

**MONMOUTH COUNTY.**

S. H. Nichols, M.D., Reporter.

The March meeting of the Monmouth County Medical Society was held at the home of Dr. J. O. Young, at Red Bank, with a very large attendance.

A motion was adopted empowering the president to appoint 1 member to serve on the Gorgas Memorial Committee.

Tentative plans were presented for a joint meeting of Mercer, Middlesex and Monmouth Counties, to be held in June, and, a Ladies' Night and Social meeting is planned for May.

A motion was adopted in favor of the annual registration of physicians.

Dr. Harry B. Slocum, of Long Branch, read an exhaustive paper on "Retrodplacement of the Uterus", considering the etiology, pathology and treatment, both preventive and curative, of this condition. Discussion was opened by Dr. Garrison and further participated in by Dr. Young, who exhibited lantern slides illustrating his personal method of shortening the uterosacral ligaments.

The meeting adjourned, refreshments were served, and a vote of thanks was extended to Dr. Young for his hospitality.

The April meeting of the Society was held at the Intermediate School Auditorium at Long Branch, the audience including besides the members of the Society, hospital officials, local health officers, public health nurses, and school teachers. Four reels of motion pictures were exhibited to show the medical aspect of the "Tuberculosis Problem" and this was followed by a discussion on the "Prevention and Cure of Tuberculosis", that was opened by Dr. Warren H. Fairbanks, of Freehold, physician to the Allenwood Tuberculosis Hospital. Emphasis was laid by all the speakers on the fact that early recognition and reporting of cases, and institutional care and hygienic precautions to prevent contact spread of infection, were the essential elements in arresting this disease and protecting the public.



**PASSAIC COUNTY.**

Louis G. Shapiro, M.D., Secretary.

The April meeting of the Passaic County Medical Society was held in the new Health Center Building, at Market and Mill Streets, Paterson, on Thursday evening, April 9. As this was the first time the society had met in the Department of Health Building, most of the men availed themselves of the opportunity of inspecting the building. Every one seemed gratified with the arrangement and equipment, and particularly so, with the meeting rooms.

Dr. Thomas A. Dingman presided. The meeting was called to order at 9 p. m., 33 members being present.

Dr. William Spickers presented a case of "Chondroma of the Humerus" that developed subsequent to an injury 3 years previously. The patient was shown 7 or 8 days subsequent to an interscapulo-thoracic amputation of the right upper extremity. The recovery had been excellent, without any shock, and the skin flaps healed by primary union. Dr. Wassing demonstrated the specimen and spoke about the pathology. He considered the growth a pure chondroma.

Dr. John L. Kantor, of New York City, spoke on "A Clinical Study of Common Anatomic Anomalies of the Colon". Congenital anomalies of the colon are common, the incidence being 10%. The most frequent anomalies are redundant colon and low cecum. In redundant colon, the large intestine is relatively too long for the individual, so that twists, pleats, kinks or loops may occur. The x-ray incidence of redundant colon is 9%, while the anatomic (postmortem) incidence is 14%. This suggests the likelihood that 5% of people having this anomaly present no symptoms. Most congenital anomalies are potential causes of symptoms. The symptoms frequently develop after crisis; such as hard work, anesthesia, operation, or childbirth.

With redundant colon, symptoms arise when compensation of the colon breaks. The symptoms are: (1) Constipation. These patients are constipated to the last degree with an interval of one week or more between bowel evacuations, unless some evacuating measure is employed; it occurs in 77% of the cases. (2) Gas causes complaint in 72%; ordinarily, a large amount of flatus is manufactured daily, but under normal conditions the greater part of it is absorbed into the circulation and excreted in the expired air. Gas is felt in the intestine only with kinking and pocketing. Pain may be present. If so, it is usually on the left side, and may be suspected as cardiac; if the back-fire of gas extends still further, to the hepatic flexure, the gall-bladder may be incriminated; if the gas extends to the cecum, right iliac pain is felt. (3) Diarrhea is present in 25% of the cases, due to irritation. (4) Vomiting occurs in about 22% of cases. (5) Volvulus occurred once in the series of 62 cases. Volvulus can only occur in the presence of redundant colon. A hard fecal mass loading down a loop, and irregular peristalsis caused by strong catharsis, are probably necessary to bring it about. The prognosis of redundant colon is made by roentgenology. The treatment should be directed toward res-

toration of colon function, by stopping cathartics and enemas, giving a large amount of roughage in the diet, administering sedatives and antispasmodics, and oil enemas if necessary.

Congenitally low cecum occurred in 100 cases out of 533 x-rayed, or 18%. On the other hand, 17 of the 553 had a high cecum. Dr. Kantor chose an arbitrary definition for a low cecum as one that has descended below the brim of the pelvis, midway down the pelvic floor, with the x-ray taken in the antero-posterior position. Low cecum is not due to ptosis because the cecum is fixed and varies only one-quarter inch in the standing and reclining positions; and furthermore, because only 73% of individuals with asthenic build have low cecum. It is the most common anomaly of the colon. The symptoms are as follows: (1) Vomiting or tendency to vomit. These individuals are the easy vomiters of every day life; 55% of them vomit. The frequency of vomiting as a symptom increases with the length of the cecum. (2) Regurgitation or nausea; 74% have this or vomiting. (3) Headache is frequent; 48% have it. Its incidence likewise increases with the length of the cecum. (4) Constipation occurred in 61%. It may be masked, i.e., in spite of daily bowel movements, the colon is not cleared in 48 hours. This can only be shown by x-ray. (5) Auto-intoxication. These patients are frequently operated on for chronic appendicitis without relief. The treatment consists in emptying the colon.

Dr. Elias J. Marsh, of Paterson, read an interesting paper entitled "Clinical Microscopy of the Living Eye", giving a brief resumé of the history and the practical employment of the procedure. (This paper will be published in full in an early number of the Journal).

Dr. Frederick P. Lee, the Health Officer, announced the organization of the health laboratory and stated that it was ready to receive specimens for examination.

The application of Dr. Anthony C. Ciccone was approved by the Board of Censors, and he was unanimously elected to membership.

**SALEM COUNTY.**

William H. James, M.D., Reporter.

The Salem County Medical Society met on the afternoon of April 8 at the Memorial Hospital, Salem, N. J. The meeting was called to order by Dr. G. A. Davies, the president. The essayist for the meeting was Dr. G. M. Golden, of Philadelphia, who spoke on "Practical Bed-side Observations in Pneumonia". The Doctor gave a most exhaustive account of the symptoms and treatment, especially glandular, of this most dreaded disease. At the conclusion of the address, the paper was discussed by Dr. Glendon, of Bridgeton, and Dr. Hilliard, of Salem, and a rising vote of thanks was given Dr. Golden for his most excellent paper.

The regular business of the Society was taken up after the essayist read his paper, as the Doctor had to meet an early train for Philadelphia.

The following physicians were present: Dr. W. T. Hilliard, of Salem; Dr. R. M. A. Davis, of Salem; Dr. G. A. Davies, of Elmer; Dr. J.



M. Summerill, of Penns Grove; Dr. C. L. Fleming, of Penns Grove; Dr. Samuel Ashcroft, of Mullica Hill; Dr. Downs, of Swedesboro; Dr. W. P. Glendon, of Bridgeton; Dr. Simpkins, of Bridgeton; Dr. E. E. De Grofft, of Woodstown; Dr. John F. Smith, of Salem; and Dr. William H. James, of Pennsville.

The next meeting will be the social session at which the Society and friends will enjoy their annual planked shad dinner. The time of meeting will be May 21, at 2 p. m.

### SOMERSET COUNTY.

Dan S. Renner, M.D., Reporter.

At the regular meeting of the Somerset Medical Society, held in Somerville on the afternoon of April 9, Dr. C. R. P. Fisher presided, the president, Dr. F. A. Wild being on vacation.

After the routine business, Dr. Aaron L. Stillwell reported a case of a foreign body, (a tin cup, 3 in. high and 1½ in. diameter) in the vagina.

Dr. L. Ely made a report of the work of the State Welfare Committee.

Dr. D. F. Weeks reported the results of the commission appointed to confer with the local Board of Health relative to better milk supply. The committee was instructed to continue its activities.

Dr. A. A. Lawton reported that Dr. Edward J. Ill and Dr. Hoffman, statistician of the Prudential Life Insurance Company, had given talks on "Cancer", at a business meeting arranged for by the Women's City Club, which was held in Somerville. This meeting was well attended and much good is anticipated from same.

The proposed changes in the By-Laws of the State Medical Society were read and motion made that the attention of the delegates be called to the changes.

### UNION COUNTY.

Russell A. Shirrefs, M.D., Reporter.

The regular quarterly meeting of the Union County Medical Society was held on the evening of April 8, at Muhlenberg Hospital, Plainfield, there being an unusually large attendance. The clinical feature of the evening was the presentation of a number of interesting patients from the surgical service of the hospital, the discussion of their records being amplified by x-ray pictures and lantern slides.

Five physicians were elected to membership: Drs. Theo. Silverman, Edw. E. Markthaler, G. A. Seymour, U. M. Frank, all of Elizabeth; and S. H. Davis, of Plainfield. Five others were proposed and their applications referred to the Membership Committee for consideration and ballot at the next meeting.

In the last few days our Society has suffered a great loss in the unexpected death of 2 of its loyal members, Dr. John S. Young, of Rahway, and Dr. Norman H. Probasco, of Plainfield. These physicians, highly esteemed not only by their medical confrères, but by the communities which they so ably served, were stricken in the prime of life. Memorial resolutions were unanimously adopted, and

will appear in this number of the Journal.

At the conclusion of the meeting an appetizing collation was served by the Superintendent of the hospital and her capable nurses, —who proved, as well, to be delightful hostesses.

### In Memoriam.

Doctor Norman Hayes Probasco, an honored and respected member of this Society, a prominent and influential figure in the community in which he lived; a man who devoted the major part of the time not occupied by professional duties to the welfare of his fellow men, has passed from our midst. The Union County Medical Society deeply feels its loss, and extends its sincere sympathy to the relatives and friends of the departed.

It is resolved that a copy of this action of the Society be transmitted to the bereaved family, and spread at large upon the minutes.

C. B. Lufburrow.

N. C. Currie.

H. V. Hubbard.

The Union County Medical Society learns with deep regret of the death, on April 4, 1925, of Doctor John S. Young.

He was a graduate of Jefferson Medical College.

He served his hospital internship at the Newark City Hospital and had become an outstanding member of his profession in the community in which he resided.

He was beloved by his patients and conscientious in the fulfillment of his duties.

His death will be deeply mourned by us all, and we extend our heartfelt sympathy to his bereaved family.

Dr. George Knauer, Committee.

## Deaths

**PROBASCO.**—Norman Hayes Probasco, 48 years old, died at his home, 965 Madison Avenue, Plainfield, April 6, 1925. He was the son of the late Dr. John B. Probasco and lived and practiced all his life in Plainfield. During the World War he served as a Captain in the Medical Corps of the Army and was stationed at Camp Dix. A widow and one son survive him.

**YOUNG.**—John S. Young, aged 43, formerly residing at 70 Irving Street, Rahway, died at Daytona, Florida, April 5, 1925. He had been in poor health for some time and had spent the winter in the south in the hope of being benefited thereby. Dr. Young had practiced in Rahway for 15 years and was one of the most popular physicians of that city.

**PAYNE.**—Ella Jane Payne, wife of Dr. Guy Payne, Supervisor of the Essex County Hospital at Overbrook, died April 1, at the Presbyterian Hospital, Newark. Mrs. Payne had been very active in social and welfare work in connection with this hospital and her services and her kindly disposition had made her a great favorite with the patients and the management of the institution.

## In Lighter Vein

**Better and Better.**—"Your new medicine has helped me wonderfully!" wrote the grateful woman. "A month ago I could not spank the baby and now I am able to thrash my husband. Heaven bless you".—Frigol.

**Scratching the Record.**—"Your daughter talks a great deal, doesn't she?"

"Yes, I think she must have been vaccinated with a phonograph needle."—New York American.

**Surgeon.**—Will you take a local anesthetic? **Mrs. Gotrox.**—Local anesthetic? No, indeed. Don't give me anything but the very best imported article.—Judge.

**Lucky Aunt May.**—"Mummy, has Aunt Betty got a little baby?"

"Yes, dear."

"Has Aunt May?"

"No, she has a little dog instead."

"Oh, I suppose she had first pick!"

—Progressive Grocer.

**Jones.**—Come over as quickly as you can, Doctor. My wife has fallen and broken her leg.

**Specialist.**—Which leg is it?

"The left one."

"You'll have to get some one else then. I specialize on the right leg only."—Judge.

### Short Sentence.

"How long you in jail fo', Mose?"

"Two weeks."

"What am de cha'ge?"

"No cha'ge, everything am free."

"Ah mean, what has you did?"

"Done shot my wife."

"You all killed you' wife and only in jail fo' two weeks?"

"Dat's all—then I gits hung."—Froth.

**A Poor Risk, Anyhow.**—Agent—"You had better let me write that insurance for you, Rastus."

Rastus—"No, sah, boss; I is not too safe at home, as it is, sah."—Libertarian.

**Popular Song.**—"They Call the Baby Coffee. 'Cause He Kepts Them Awake at Night."

—Oregon Owl.

### Standing in His Wardrobe.

"Ah's gwine go to de pathy t'night, but fust Ah's gotta go home an' change mah clothes."

"Change yo' clothes? Boy, when yo' buttons yo' coat, yo' trunk am locked!"

We build better than we know. The cotton plant doesn't know it is producing wool and olive oil.—Atlantic City Press.

There are now sixty-five products of the lowly peanut, not counting the tummy-ache.—North Adams Herald.

**Common Disease.**—"Why do you call your flivver Pyorrhea?"

"Because four out of every five have one."—The Widow.

**Annual Reprint of the Report of the Council on Pharmacy and Chemistry of the American Medical Association for 1924.** Cloth. Price, postpaid, \$1.00. Pp. 82. Chicago: American Medical Association, 1925.

This volume contains the reports of the Council on Pharmacy and Chemistry that have been adopted and authorized for publication during 1924. Some of these reports have appeared in *The Journal of the American Medical Association*. Other are now published for the first time.

The annual volumes of the "Council Reports" may be looked on as the companion volumes to *New and Nonofficial Remedies*. While the latter contains the medicinal preparations that are found acceptable, the reports contain the reasons why certain products were not accepted. Thus the present volume contains reports on the following products which the Council denied admission to *New and Nonofficial Remedies*: Aolan; Aspatol; Atussin, Peptoproteasi, Paraganglina Vassale, Fosfoplasmina, Asmoganglina and Endo-Ovarina Tablets; Borosodine; Carsinol; Colodine and Colobromidine; Ferrasin; Glyeuthymenol; Hoyt's Gluten Flakes; Iodeol; Loefflund's Food Maltose; Mistura Creosote Comp. (Killgore's) and Tablets Cascara Comp. (Killgore's); Neo-Riodine; Nicomors; Peptone Solution for Hypodermatic Use (Armour); Pixalbol; "P-O-4"; Pollantin; Promonta; Pruritus Vaccine Treatment-Lederle (Montague Method); Restor-Vin; Some "Mixed" Vaccines of G. H. Sherman and Tressul Hiller.

The volume also contains reports on products which were included in former editions of *New and Nonofficial Remedies* but which will not appear in the 1925 edition because they were found ineligible for further recognition. Among these are polyvalent antipneumococcic serum, colon bacillus vaccine, gonococcus serum and gonococcus vaccine.

The volume contains a number of reports of a general nature: for instance a report on the therapeutic value of benzyl benzoate; a report on anaphylaxis produced by thromboplastic substances and a report on the therapeutic use of digitalis.

Physicians who keep fully informed in regard to the value of proprietary remedies will wish to own this book.

**Agrilin Not Accepted for N. N. R.**—Agrilin is the uninformative name under which Lehn and Fink, Inc., New York, market a mixture of liquid petrolatum and agar. The preparation is stated to contain 38.6 per cent. of liquid petrolatum, and 2.25 per cent. of agar. Agrilin is offered to the medical profession and also through the trade package and newspaper advertisements to the public. The Council on Pharmacy and Chemistry found Agrilin unacceptable for *New and Nonofficial Remedies* because (1) the name is not descriptive of its composition; (2) it is marketed with claims that are unwarranted and misleading and (3) it is advertised directly and indirectly to the public and thus furthers the ill-advised use of laxatives. (*Jour. A. M. A.*, Mar. 14, 1925, p. 837.)

He who laughs last is usually the dumbest.  
—Yellow Jacket.



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## RECOGNITION OF EARLY RENAL DISEASE.

NELLIS B. FOSTER,

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The clinical recognition of nephritis began with Bright's studies, and of the criteria for diagnosis on which he depended the most important was albuminuria. These studies of Bright excited an interest in albuminuria as a symptom and during the remainder of the century there was an extension of our knowledge of the various disorders and diseases with which albuminuria is more or less constantly associated. As examples of such diseases, one may mention the amyloid kidney and chronic passive congestion of the kidney due to heart disease. The immediate result of this increased knowledge was that albuminuria lost its especial significance as a sign of nephritis and during the present century, after it became the custom to test the urine of every patient in a routine way, the fact that albumin is found in the urine in many diseases, that its presence is often transitory and only occasionally associated with other signs of nephritis, all tended to detract from the significance of this symptom. From a sign indicating renal disease, it has become a sign of no particular indication. It occurs too commonly as a transient phenomenon in numerous diseases to maintain preëminence in any particular syndrome.

It was primarily because albumin occurs in the urine in so many diseases that attention was directed toward finding other means for the detection of nephritis. The fact that advanced degenerative lesions in the kidneys were not invariably associated with albuminuria was another reason for a different diagnostic criterion. Thus began the attempts at diagnosis by estimation of function. These attempts have been numerous, from indigo-carmin, lactose, iodids, to the dyes of which phenol-sulphonaphthalein is the best example. These tests were none of them really useless, though some are better than others, but all have failed in a measure since by not one can nephritis be excluded.

In the period between 1890 and 1900 chemistry made it possible to study renal function by analysis of the blood. Defective excretion of



urea or other nitrogen compound, or of sodium chlorid, resulted in accumulation in the blood which in turn could be detected and measured. Either by blood analyses alone or combined with quantitative analyses of the urine, much was expected from these methods. These procedures are known to all of you and need no enumeration. They have a certain narrow field of usefulness but none has fulfilled its early promise. And why is this? Primarily because the factor of safety in respect to the kidney is enormous. Many glomeruli and tubules can be so gravely damaged as to be incapable of any function and yet enough remain intact to meet the needs of the body. We know, for example, that the loss of one kidney imposes no handicap. If half the glomeruli and tubules are functionless, it would seem there is no difference whether this loss result by removal of one kidney or by the destruction by disease of half of the glomeruli in each kidney. The net result is that enough remain functioning to meet the demands for excretion. These tests of blood urea and phthalein excretion do have a field of usefulness but that field includes only the examples of advanced disease. In early incipient disease, they are useless.

And the same criticism holds for tests which employ measure of concentration of the urine, either by means of specific gravity or by estimation of the concentration of urea or salt in the urine. It is true that in advanced nephritis the specific gravity of the urine tends to become low and the concentration of urea may not rise above 1%; but in early stages of chronic nephritis these tests are of no help, and it is our endeavor, indeed our only opportunity, to recognize these disorders before structural lesions are advanced.

In general, functional tests have failed to fulfill the demands of clinical diagnosis because the function of the kidney is not a single activity. Rather, there are a number of distinct functions, any one of which may be insufficient without of necessity involving others. This fact is notable in various types of nephritis. For example the clinical entity which is sometimes called parenchymatous nephritis and is characterized by edema, a scanty, concentrated urine containing much albumin, and by low blood pressure. This is the clinical picture induced by the large white kidney. The defect in function is in respect to sodium chlorid and water, and both are found increased in the tissues. But in these cases there is no notable increase in urea in the blood, nor of any other nitrogen-containing substance. Contrast this clinical picture and the perversions of function with that produced by the granular contracted kidney. The volume of urine is normal or increased, there is no retention of water or of sodium chlorid but there is, at least in advanced cases, a defective nitrogen excretion and an increase of non-protein nitrogen, of urea, possibly of uric acid in the blood and tissue fluids. The two disorders represent quite distinct and different functional defects. Moreover, even in the type of nephritis conspicuous

for nitrogen retention, there is notable a difference in the ease with which various nitrogen fractions are excreted, i.e., more urea may be retained without retention of uric acid or creatinin; or uric acid may fail of excretion though urea shows no retention and so on. The kidney has many discrete and independent functional activities; disease may injure one of these functions in this case, another function first in that; how illogical to expect that any one test can be made to show defect in all of these varying discrete activities. The considerations which have been enumerated have made me feel the necessity of some more systematic method of study in suspected cases of renal disease than is in general use. And particularly is this so because a large number of seemingly healthy persons are referred to me on account of some symptom which excited suspicion of renal disease. These most common symptoms are albuminuria, lesions in the retina, and elevated blood pressure. Many of these patients are young and had supposed themselves healthy until refused life insurance.

During the last few years, life insurance organizations have been studying symptoms in a most scientific manner. For these studies they have available thousands of cases, and information concerning the duration of life and the cause of death. In respect to albuminuria, the facts do not indicate that this is the trivial matter which we have been taught to think it. The life span for individuals with albuminuria is shorter, and past the age of 30 the constant presence of a faint trace of albumin in the urine is an ominous sign. The mortality for persons with albuminuria, but no other evident sign of disease, in the decade between 35 and 44 years, is 267% above the average for that group, and over 40 years of age the group with a trace of albumin has a mortality from Bright's disease of 1260 per 100,000, about 10 times the ordinary incidence. Under 30, albuminuria seems to be an early symptom of tuberculosis, heart disease and nephritis. After 30, nephritis is the special consideration. Considerations of this sort have led us to attempt some practical systematic study of cases, and in this system we have included all of the methods which seemed likely to be of service.

Now, with this idea in mind, that albuminuria is a sign of importance, that it means disorder and possibly disease, I will show you the results of systematic study of some cases. The first case is that of a woman, 34 years of age, (Chart I.), who was referred to me as a case of nephrosis. She was an obese woman, weighing 231 pounds, and her chief symptoms were albuminuria, very slight edema of the legs, and fright concerning her condition. The albuminuria was marked; the

(CHART I.)

Physical Examination—

Fundus oculi:—Hemorrhage, none; exudate, none; edema, none; arterio-sclerosis, none; neuritis, none.

Heart, apparent hypertrophy, 0; hypertension, 130 syst., 15 diast.

Edema, face: +; back, —; legs, +.

## Laboratory Examination—

Urine:—albumin, ++; casts, + leukocytes, 6; blood, 0.

Blood:—Urea N. above 15 mg., 10.7.

Phenol:—S—Phth—recovered in 2 hrs., 47, 56, 53.

Water-fast:—Specific gravity night urine, 1.025.

Water Ingest:—Volume of urine in 4 hrs., 720; lowest sp. gr., 1.004.

urine boiled solid. But with the exception of the water tests, (which I shall explain later), the renal function seemed to be not seriously impaired. It required 2 years of observation to arrive at a diagnosis in this case. Following a slight respiratory infection, there developed first a considerable swelling in the glands of the neck. This adenitis has persisted. Later, there were localized signs of increased moisture at one apex. She was sent to a tuberculosis sanitarium where tubercle bacilli were ultimately found in the sputum. I show this case for 2 reasons: first as an example of tuberculosis in which the first signs of disease were notable in the urine, though there is no evidence of renal tuberculosis; second, the case had been regarded as one of nephrosis, which I think is a very uncertain diagnosis on which to rest. The majority of cases of this disease that have come to my attention have turned out to be cases of some form of infection.

When albuminuria is the sole symptom, as it sometimes is, it is important first to determine whether it is constant or intermittent. Having excluded purely cardiac lesions, which if severe enough to cause albuminuria would probably give symptoms as well, the next step is to exclude postural or orthostatic albuminuria. The characteristic of this disorder is that the urine voided by the patient while he is up and around contains albumin, often much albumin; but when he is in bed, the urine passed is clear. The procedure in diagnosis is to direct the patient to empty the bladder before going to bed and to empty it again before he gets up in the morning. The latter specimen in typical cases contains no albumin, while all other specimens show heavy clouds. We used to consider this disorder rather rare, but I now see numerous cases. It is a circulatory disorder, not a nephritis, and is most commonly observed during adolescence, but it does occur in adults. Many of the young adults are of the asthenic type, and possibly this group is subject to tuberculosis.

In order to explain the nature of the examination, the next chart is that of a patient who had had one kidney removed on account of carcinoma. (Chart II.). In spite of the loss of one kidney the response

## (CHART II.)

## Physical Examination—

Fundus oculi:—Hemorrhage, 0; exudate, 0; arterio-sclerosis, 0; neuritis, 0.

Heart, apparent hypertrophy, 0; hypertension, 124 syst., 68 diast.

Edema, face:—none; back, none; legs, none.

## Laboratory Examination—

Urine:—Albumin, 0; casts, 0; leukocytes, 0; blood, 0.

Blood:—Urea N. above 15 mg., 13.40.

Phenol:—S—Phth.—recovered in 2 hrs., 56.

Water-fast:—specific gravity night urine, 1.036.

Water Ingest-volume of urine in 4 hrs., 1110; lowest sp. gr., 1.002.



to all the tests was normal. This patient was 33 years of age and showed no evidence of vascular or cardiac disease. You are familiar with determinations of blood-urea, and phenolsulphonephthalein, and their significance. The water-fast, is a test of the kidneys' ability to function under adverse conditions. If early stages of nephritis are to be discovered, the test must impose a severe strain. Accordingly, no liquid, water, tea, coffee, milk, or soup, is permitted from breakfast one morning till breakfast time of the next day. Each voiding of urine is saved and the specific gravity determined. The night voidings are most important since the patient will have been longest without fluid. Usually the specific gravity rises to 1.030 or more. It is the highest concentration that is important. This case reacts normally, in spite of having but half the normal amount of secreting tissue. The ideal test it seems to me should show a difference between a man with one kidney and a normal man. But no practical test seems to do this. The water ingest test is carried out by having the patient drink 1500 c.c. (6 glasses) of water while fasting in the morning. All the urine is collected for 4 hours and the total volume is normally over a liter, often 1400 or 1500 c.c. The specific gravity sinks to 1.002 or 1.001.

In these tests the essential principle of any test is involved, namely to impose strain. *If an organism is not forced to work under stress, no defect is evident until disease is advanced.* That is my criticism of the usual concentration tests. Early stages of disease are not discovered.

The next chart shows the study of a case of moderately advanced nephritis. (Chart III.) He had no symptoms until a disorder of vision

#### (CHART III.)

##### Physical Examination—

Fundus oculi:—Hemorrhage, punctate; exudate + flecks; edema, 0; arterio-sclerosis ++; neuritis, 0.

Heart, apparent hypertrophy, +; hypertension, 200 syst., 110 diast.

Edema, face: 0; back, 0; legs, 0.

##### Laboratory Examination—

Urine:—albumin, ++; casts, +; leukocytes, 0; blood, 0.

Blood:—Urea N. above 15 mg., 22%.

Phenol—S—Phth.—recovered in 2 hrs., 38%.

Water-fast:—Specific gravity night urine, 1.017; 1.017; 1.017.

Water Ingest—volume of urine in 4 hrs., 880; lowest sp. gr., 1.005.

took him to an ophthalmologist. Beside the general trend of all tests, notice the reaction to the water-fast and water-ingest tests.

The next case (Chart IV), is of the same general type but not so advanced in the disease.

#### (CHART IV.)

##### Physical Examination—

Fundus oculi:—Hemorrhage, 0; exudate, 0; edema, 0; arterio-sclerosis, 0; neuritis, 0.

Heart, apparent hypertrophy, 0; hypertension, syst., 140; diast., 90.

Edema, face: +; back, +; legs, 0.

## Laboratory Examination—

Urine:—albumin, +++; casts, +; leukocytes, +; blood, +.  
 Blood:—Urea N. above 15 mg., 28.98; 23.92.  
 Phenol—Phth.—recovered in 2 hrs., 56.  
 Water-fast:—specific gravity night urine, 1.020.  
 Water Ingest—volume of urine in 4 hrs., 275; lowest sp. gr. 1.013.

The next case is one which I regarded 2 years ago as an example of essential hypertension of a most severe type. (Chart V.) The pa-

## (CHART V.)

## Physical Examination—

Fundus oculi:—Hemorrhage, none; exudate, ++; edema, 0; arterio-sclerosis, +; neuritis, slight.  
 Heart, apparent hypertrophy, +; hypertension, 235 syst., 140 diast.  
 Edema:—face, none; back, none; legs, none.

## Laboratory Examination—

Urine:—albumin, trace; casts, none; leukocytes, 0; blood, 0.  
 Blood:—Urea N. (above 15 mg.), 10.6 mx.  
 Phenol—S—Phth.—recovered in 2 hrs., 47%.  
 Water-fast:—specific gravity night urine, 1.022.  
 Water Ingest—volume of urine in 4 hrs., 980; lowest sp. gr., 1.002.

tient is 34 years old and looks robust. He was rejected for life insurance on account of hypertension. During the last year he had shown albuminuria which I felt inclined to attribute to early cardiac incompetence, but the general indication at present is toward renal sclerosis.

A healthy young man had an infected finger following a slight injury. The infection lasted a week or so and subsided under the care of his physician. Some 2 weeks later he again consulted his physician, because of lassitude and the color of his urine. The patient was referred to me and is interesting as an example of mild acute nephritis. (Chart VI.) The only functional tests which indicate disease are the water-

## (CHART VI.)

## Physical Examination—

Fundus oculi:—Hemorrhage, 0; exudate, 0; edema, 0; arterio-sclerosis, 0; neuritis, 0.  
 Heart, apparent hypertrophy, 0; hypertension, syst., 120; diast., 78.  
 Edema, face: 0; back, 0; legs, 0.

## Laboratory Examination—

Urine:—albumin, ++; casts, +; leukocytes, +; blood, +.  
 Blood:—Urea N. above 15 mg., 15.8.  
 Phenol—S—Phth.—recovered in 2 hrs., 52.  
 Water-fast:—specific gravity night urine, 1.022.  
 Water Ingest—volume of urine in 4 hrs., 680; lowest sp. gr., 1.008.

fast, and the water-ingest; the night urine has a maximum specific gravity of only 1.022 and following the taking of a liter and a half of water but 680 c.c. are voided in the next 4 hours.

It would be expected that even mild degrees of pyelitis would be associated with some slight degree of impairment of renal function and the case shown in Chart VII. seems to prove this. Of course, these disorders may be only transitory.

## (CHART VII.)

## Physical Examination—

Fundus oculi:—Hemorrhage, 0; exudate, 0; edema, 0; arterio-sclerosis, 0; neuritis, 0.

Heart, apparent hypertrophy, 0; hypertension, syst., 114; diast., 62.

Edema, 0; face, 0; back, 0; legs, 0.

## Laboratory Examination—

Urine:—albumin, +; casts, 0; leukocytes, +; blood, 0.

Blood:—Urea N. above 15 mg., 13.9.

Phenol—S—Phth.—recovered in 2 hrs., 48%.

Water-fast:—specific gravity night urine, 1.025.

Water Ingest—volume of urine in 4 hrs., 585; lowest sp. gr., 1.006.

While this particular form of systematic examination falls far short of my idea of a perfect method, it is nevertheless better than any one of the so-called functional tests. Nephritis can be recognized in its earlier stages. And it would seem that this is important. Finally, constant albuminuria is always a symptom requiring study and in persons over 30 years of age it always arouses grave suspicion of nephritis even when the man appears in perfect health.

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**CLINICAL MICROSCOPY OF THE LIVING EYE.**

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ELIAS J. MARSH, M. D.,

Paterson, New Jersey.

Two things which greatly aid us to see the details of any structure or process are illumination and magnification. This is especially true in the eye, for in no other organ are important structural parts at once so small and so readily accessible for inspection. Who first took a convex lens in each hand and with 1 focussed the light on the eye, while magnifying the image with the other, we do not know but his act originated microscopy of the living eye. Since then, repeated improvements have been made in each of the 2 factors concerned, until about a decade ago the combination of the brilliant achievements of 2 men, 1 in each of these 2 fields, resulted in the greatest advance made in ophthalmic science since the invention of the ophthalmoscope in 1851. This great achievement was attained just as the outbreak of the World War threw everything else into the shade and, consequently, it reached America only about 3 years ago and the ophthalmologic world has hardly yet recovered from its astonishment at the discoveries thus revealed.

About 25 years ago, Csapski brought out his binocular corneal microscope, using the principle of the Porro prism now familiar in the Zeiss binocular field glasses, whereby the objectives are brought close together at a suitable angle and the eye-piece not too far apart, the image at the same time being upright, instead of inverted as in



the ordinary microscope. With a small lamp and condensing lens attached to the microscope stand, this was a useful instrument for the examination of the anterior part of the eye, but nothing revolutionary, and for general use not justifying its cost.

The same reason which led to the invention of the corneal microscope urged other workers to attempt a magnifying ophthalmoscope. The chief obstacle to success was the annoying light-reflex from the summit of the cornea, so familiar to everyone who has used an ophthalmoscope. This difficulty was finally overcome by Professor Gullstrand, of the University of Upsala, by means of a lamp with an optical system which threw a narrow beam of brilliant light onto the side of the cornea, whence it passed laterally into the eye to illuminate the fundus, leaving the centre free for the emergent rays. These rays, passed through an observing telescope, give a stereoscopic picture of the fundus several times larger than the ordinary method, but the result obtained, like that of the Csapski loupe, though interesting and valuable, is by no means revolutionary. When, however, appreciation of the remarkable focal illumination of the cornea thus obtained inspired the combination of the stereoscopic loupe of Csapski with the slit-lamp of Gullstrand, true clinical microscopy of the living eye was attained, and a new world stood revealed.

## II.

Everyone has at some time been in a darkened room into which a narrow beam of sunlight entered through a crack in the shutter, and has noticed floating in the sunbeam particles of dust which would be entirely invisible in a fully lighted room. Here one has exactly illustrated the principle of the Gullstrand lamp. The essential principle of this lamp is the optical system by which the light of a brilliant and homogeneous source is concentrated in a narrow beam which can be directed and focussed as desired, while all aberrant rays are cut off, thus giving a clear-cut contrast between bright light and darkness in transparent or translucent tissues, and so rendering visible details that diffuse light would obscure in a general blur. The lamp consists of a spiral tungsten filament in a nitrogen bulb enclosed in a lamp-housing, the light from which, focussed by a condensing lens, emerges through a narrow slit as a sharply defined rectangular beam, this beam being again focussed by a suitable lens on the field to be examined. Another form uses the "point-o-lite", or arc-incandescent lamp, the luminous element of which is a small highly incandescent platinum sphere. This gives a very brilliant and homogeneous light, which focusses at a point instead of at a line, the diaphragm aperture and the emergent ray being circular in outline, instead of rectangular. This form of the lamp was exhibited in this country by Gullstrand in 1922 under the

name of the "hole lamp", the general term of diaphragm lamp being used by him to include both the "hole lamp" and the "slit-lamp". Each form of light-bundle has its advantages, and at present both lamps are provided with stops to secure either form.

This beam of light, when focussed on the cornea, penetrates the transparent structures of the eye with an edge as sharply defined as if cut by an instrument, thus producing the so-called "optical section". That made by the rectangular beam may be compared to a chisel cut, and that of the cylindrical to the hole made by a drill. Four different methods of examination are possible by this light with the microscope: (1) Direct examination under focal illumination; (2) dark-field study under "transmitted" or reflected light; (3) study of the reflections from the various optical surfaces of the refracting media; (4) finally, by the light diffused laterally through the structures by tissue irregularities.

### III.

Now, what can we see in the eye by this new means, that was not seen before? To begin to tell you all the wonders thus revealed would far exceed the limits of this paper. But let us take a few glances, beginning at the outside. At the limbus of the cornea may be seen an intricate network of anastomosing capillaries in which the blood stream can readily be seen; in the finer ones each individual red or white cell being plainly observed as it rolls along in the current. In old interstitial keratitis, or pannus, where new vessels have been formed in the cornea, a string of blood-cells may sometimes be observed slowly crossing the field in a way that suggests more than anything else a pack-train crossing the prairie, whereas the limbal vessels, with their larger stream and swifter current suggest a log-jam going out in a freshet. It has been reported that in some of the connecting vessels of the limbus the current may reverse itself, flowing now one way and now another, but this I have not myself observed. Following the light-beam into the corneal parenchyma, in the anterior part, we may see the corneal nerves, branching dichotomously, and by instilling methylene-blue into the conjunctival sac it is possible to stain and render visible their terminal filaments. In the dark-field, by the aid of transmitted light reflected from the iris, deposits of cells or pigment on the posterior corneal surface can be mapped and studied, while in the light rays reflected from the posterior corneal surface the squamous epithelium of living Descemet's membrane can be clearly seen, and with a suitable magnification each individual cell distinctly recognized.

Passing through the cornea, we come to the aqueous humor. This is normally a clear fluid, and so "optically empty", appearing simply as a break in the light-beam, between the cornea and the iris or lens. But, in inflammations of the uveal tract or after contusions, fine floating particles may be seen in it, exuded cells or wandering

pigment particles, before any haziness of the aqueous can be recognized in any other way. It has long been questionable whether there is any current of the aqueous in the anterior chamber. With the slit-lamp and corneal microscope, these cells may be seen in regular movement, ascending in the posterior part, moving forward and descending again behind the cornea. The generally accepted theory is that the anterior part being nearer the surface, cools and descends, while the deeper parts are warmer and a current rises. However, this theory is not proved, but the current may easily be seen, as well as the cells in the aqueous.

Of all the fascinating and delightful things to be seen with the corneal microscope, the iris is easily first. To watch the constant action, contraction and relaxation of the trabeculae, to look into the depths of the crypts with the stereoscopic loupe, or watch the rolling and unrolling of the pigment ring at the pupillary margin, as it slides over the lens capsule, is an unending source of interest. On the other hand, the first stages of pathologic processes can be detected by this means much earlier than by any other.

The first thing to notice about the lens is the shagreen marking or graining of the anterior surface. The next point that calls for attention in normal lens is the distinction between the different layers of which it is composed; cortical, perinuclear, nuclear, etc., as manifested by the reflections from their respective surfaces. They are much more clearly recognized in this way, by their refractive differences than in the stained and mounted section. Likewise, we readily note the suture uniting the embryonal segments of the lens nucleus, typically in the form of a Y on the anterior surface and an inverted-Y on the posterior, but showing many variations. It would be hopeless to try to enumerate all the various and often beautiful forms of opacities to be seen in the lens in different stages of cataract, or even in what might otherwise pass for a normal lens. At the posterior pole, with sufficient illumination, may be seen the remains of the embryonal hyaloid vessels, which, we have usually been taught, were absorbed and disappeared in the fully developed eye, remaining as a rare anomaly. We now know better.

Whether the vitreous body had a frame or structure, or whether it were truly homogeneous and the structure seen in the stained and mounted sections was an artificial or postmortem change, has long been a matter of dispute. It is now finally settled by the slit-lamp, for in its ray the fine lattice-like structure may easily be seen by the aid of the corneal microscope, resembling a lace curtain swaying in the wind as the eye moves. This structure apparently reaches forward nearly, but not quite, to the posterior lens capsule, between which and it is a shallow, "optically empty" space resembling that of the aqueous humor in front. Under the intense illumination of the micro-arc lamp, however, a very fine, fiber-like frame work has



been shown to exist here also, as well as in the spaces between the lamellar structure already described. This I have never yet had the opportunity of seeing.

Owing to the dispersion by the various refracting media in the anterior part of the eye, and also to the axial deviation of the twin microscope tubes, it is impossible to see into the vitreous beyond its anterior third. Koeppe, however, has invented a contact lens which, when placed over the cornea, has the optical effect of flattening the corneal surface and so bringing the fundus forward to a position only a few millimeters behind the lens and has thus been able to study the living retina under a very high magnification. This method has not been very widely used. Koeppe has also designed another contact glass which makes possible the direct study of the iris-angle in cases of actual or suspected glaucoma.

The corneal microscope is provided with optical systems which give a magnification ranging from 8 to 103 diameters; beyond this the physiologic oscillations of the eyeball make it impracticable to go. Even as it is, the higher powers are seldom used, and I, myself, have never seen them. Those commonly in use vary between 24 and 86 diameters, the former more used than the latter.

#### IV.

And now a word about the practical utility of this most astonishing apparatus. Granting the fascination of the wonders it has revealed, and the aid it has given and will give to scientific investigation, what is its actual value to the practicing ophthalmologist, and through him to his patient? As in the case of any other instrument, that depends, of course, primarily on the man who uses it. First, he must know the art of using his tool. Next, he must understand what he sees. Finally, he must be able to interpret his observation in terms of pathology of the organ. It is easy to make the mistake which follows the introduction of every new means or method, viz: expecting from it the impossible. The man who expects to find ophthalmology made simple; who expects to look into the microscope and read a diagnosis written in legible letters in the beam of a slit-lamp, will be dissatisfied. On the other hand, for the man who knows what to look for and what he sees, a great opportunity is offered. In determining the nature, and consequently the treatment, of various inflammatory and degenerative processes of the cornea, much aid may be derived from a study of the character and relative position of the various infiltrates or deposits. The incipience, course and prognosis of many cases of cyclitis can be determined by observation of floating particles in the aqueous. Some observers have detected by this method the very earliest signs of sympathetic ophthalmia yet discovered. Vogt says that in certain cases of iridocyclitis with secondary glaucoma he has been enabled to continue the use of eserine longer than would otherwise have been pos-

sible, since, by watching the iris at regular intervals, twice a day or oftener, he could substitute atropin at the very beginning of synechial formation. Barraquer, of Barcelona, before doing his vacuum-cup operation for the extraction of cataract, studies each case with a slit-lamp to determine the frequency and amplitude of the vibration necessary to break the suspensory ligament of the lens. Many more instances might be given. Von der Heydt, of Chicago; Bedell, of Albany, and other enthusiasts use it as a routine method of examination in every case; on the other hand, as plainly stated in the beginning, both the art and the science are new. In a recent article on senile cataract, Edward Jackson, than whom there is no safer and at the same time more sanely progressive writer in America, says of slit-lamp microscopy of the lens that it "doubtless will ultimately greatly advance our knowledge of the natural history of cataract. But till we learn more of the significance of what they reveal, they may prove confusing and misleading rather than enlightening. In this matter a rather long perspective of observation is essential."

That sentiment applies in general to the whole subject. Much of immense value has already been learned, and more will be learned. That in some respects the results will be disappointing is probable. But, it may be safely asserted that thanks to Gullstrand and to those who followed up the opportunity he opened, ophthalmology has entered upon the longest step forward that has been taken by any branch of medical science in recent years.

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## THE INFLUENCE OF PHYSICAL CAUSES ON THE MORAL FACULTIES.

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### CHARACTER.

Character is the sum of mental attributes of one as judged by another, such judgment varying with each individual mind. We appreciate our own virtues, only to see the faults of others. In everyday life the results of culture are pushed aside and we react as did our barbarian ancestors. Charity, sympathy and self-repression are but recently acquired virtues and are not inherent. A few generations back we find character clogged by ignorance, superstition and fear of the mysterious, and emotion reigning. "It is odd what mixtures we mortals be!"

This variation in the moral faculties, that is, character, is geographic. That which is considered proper and customary in the Orient would be tabooed and considered iniquitous in the Occident. Howells

said that in Italy the seventh commandment is considered "droll". The community bathing in Scandinavia is scandalous here. The moral tone of the Puritan is not that of the Latin. It can be seen in the sense of humor, which differs in Germany from France and in both these countries from England and America. We see it varying from age to age. Any one conversant with the history of peoples cannot but note the changeful reactions as time progresses. At the time of Lincoln the press had more that was scurrilous, vile and common in their editorials than would be permitted in our yellowest sheet today. Heraclitus in the sixth century B. C. said that "Character is but Destiny".

The soul of one is as perfect as that of another. We cannot but believe that psychically we are all born equal, but given bodies so diverse in intimate structure that mentality, character, morals and personality must necessarily vary. We will act and react according to the mechanism that was given us for expression.

#### EMBRYO.

This varying of character as expressed by individuals and communities may best be explained through a study of the life history of the germ. Every egg has in its nucleus a beaded chain of fibrils, called chromosomes, because they stain heavily for the research worker. Each species has a definite number. It being difficult to obtain the egg of man, the number is not known exactly, but there are approximately 24, the male and the female each containing the same. All hereditary characteristics are carried down through them and not modified by the individual, but as the result of the influences of past generations. Passing from ancestor to descendant through the individual they may be considered immortal, for they connect Adam with the long future. They have been compared to the Promethean fire, which was picked up as a brand from the original flame and never extinguished as it went from place to place, time elapsing.

#### FECUNDATION.

The female germ escaping from the ovary meets the male in the outer part of the fallopian tube, one and only one of the male germs being permitted to enter the ovum. Its contained chromosomes immediately proceed toward those of the egg and lie alongside of them, each by each. Then begins that wonderful process of segmentation and growth, so that in a period of 9 months the greatest of all miracles is performed and from a diminutive egg we have delivered a child with all the possibilities of a full and glorious life, the most perfect creation of an Almighty Creator.

#### IMPLANTATION.

Nature's child, the chromosome homunculous, is now started on its life journey, but must first make a body to carry the immortal germ-plasm and the mortal brain, so it passes quickly down the oviduct to the interior of the prepared womb, and, dropping into a crypt, burrows



deeply and is hidden, there to be sustained by fluids in various fashion. Here it meets its first danger. If the fluids be pure and well-adapted, all will go well, *but*, if the bed be altered by previous infection the result will be imperfect—"a monster". Mall and others have shown that if there be a variation of the electrolytes, that is, the potassium and sodium in the surrounding fluid, there will be an invariable alteration in the growth of certain parts of the embryo. The modicum of too much potassium will affect the heart and diminish its size as well as that of the aorta, and will also cause changes in the nervous system. Sodium in excess will retard the brain, with a failure in the closure of the spinal canal, spina bifida. The central nervous system suffers very frequently in the pathologic embryo, and, as the forebrain is the latest acquisition in evolution, slight atrophy is not infrequent. "A monster" occurs once in about 150 labors and is always produced by extrinsic causes.

If the mother's blood be charged with alcohol during pregnancy, it will pass to the fetal circulation with a tendency to idiocy, epilepsy, hysteria, and malformation; 50% of the children of mothers who drink suffer in this way. Keep an habitual inebriate away from alcohol, as in jail, and the pregnancy is without defect, as is proven by prison records. Parental inebriety often leads to sterility, abortion and still-births.

#### BIRTH.

The second danger to be met by the innocent infant comes at the time of delivery, when the child's brain is but pulp. The walls of the veins being extremely friable, prolonged compression of the child's head, or the sudden expulsion of rapid delivery with quick relief of pressure, may lead to hemorrhage from the veins of the membranes of the brain, or from capillaries into its substance; 50% of the fatal terminations are hemorrhagic, and in a series of lumbar punctures on 100 consecutive newborn infants within the first 48 hours, 9% were found to have had hemorrhages. Small and signless hemorrhages are not sufficient to cause death. Postmortem examinations on infants dying in or shortly after tedious labor revealed tears of the dura and punctiform capillary hemorrhage into the brain substance. There is greater danger to the first child's brain, particularly if a male. The infants who recover after a protracted or too rapid delivery, who suffer from hemorrhage, whether on the surface of the brain or in the interior, have scar formation, more or less extensive according to the type of hemorrhage. It is often noticeable that in a large family the first child is not as clever, keen or quick-witted as those who follow, and it is said by some alienist that the first children are much slower in humor, are more inclined to be erratic, and do not perfectly coördinate with their surroundings.

#### MORPHOLOGY.

In time the divine impulse in the original chromosome ceases in effect. When the body is about a score years old, there is a cessation of growth, and development is complete, as evidenced in a great variety of

body form, which, however, can be reduced to 2 extreme types. By heredity we are fated to a certain type of physique and a certain quality of mind, but, with all that, plastic, so that environment, will-power and the psyche may mold, and, to a limited extent, vary the product.

In Europe, where there has not been that intermixture of peoples, owing to differences in language, as is seen in America, we have facilities for more accurate study of form and influencing conditions. Back in the mountains where there are those who for many generations have toiled far from the communal effect of city life, we find the round headed, round faced individuals. Where the soil is poor, and life is a struggle, they are apt to be short in stature. If the ground be more productive and life easier, they are somewhat taller. We find in them a broad upper jaw, low palate, and hard teeth, uniformly and beautifully placed, which are not given to disease. These people are deep chested and broad at the waist line. Their viscera hang high. Their bones are large and strong and the ankles massive. Though intellectually capable, they are not quick witted, but pacific and patient, although, if forced to the wall, will prove sturdy fighters. In the cities where competition is strong, we find the other type with long head, oval face, slender bones and small ankles. They, too, possess good teeth and well developed chests and abdomens. Intellectually, they are quicker and more alert. It is rare for the roundhead to become a leader or to obtain authority and hold it. This is generally the sphere of the long headed man. If the roundhead comes to the city, he is prone to go back home to die, but, should he remain there in 2 or 3 generations the head and face will change to that of the long type. We thus see the effect of geology on the physique, and, in places called "misery spots", where life is a struggle for existence, there is a very different physique, a very different mentality and a very different type of moral character than where livelihood is easier. There is no difference in the intellectuality of the types, except that the roundhead will spend years studying the diatom, while the longhead is only satisfied with quick results. In religion the roundhead looks to leadership as in other matters and more generally he belongs to the Roman Church, whereas the longhead is impelled to think for himself, and, as a rule, is a protest-ant.

#### MORPHOLOGIC DEFECTS.

We have a third type, the abnormal, which is increasingly found in "civilized" life, where the vicious circle of poverty, dissipation and lack of hygiene has produced its effect. These are, also, descendants of so-called highly neurotic parents. We have an evidence here of the old saying that "God makes the eyes, but man makes the face". We may have a marked intellect and a poor body. The upper jaw is narrow, the teeth are crowded, overlapping, poorly nourished and decay early, all leading to a train of symptoms so well recognized today in the focal in-

fections throughout the body, particularly the heart. The vault of the mouth is pushed upwards, producing a deviation of the septum of the nose, diminishing the respiratory intake, perhaps but little, but that little means much, for oxygen is Nature's most important food, and with a slight diminution in the amount of inflation of the lung, we have an oxygen-starved individual, tending to tuberculosis. The adenoid and tonsillar tissue are apt to become infected, another focal point, with its added dangers. The chest is shallow, completing the circle of respiratory embarrassment. The girdle being narrow, there is not space in the upper abdomen for the viscera, and, owing to nutritional defects, the fat disappears, and with the natural supports of the organs lost, they become easily displaced. There is a proverb that deep breathing means deep thinking. A healthy body has a healthy mind. Proverbs may not always be correct, but they certainly carry a germ of truth.

With the anatomic there are coexisting physiologic defects. The nervous system is weak and the effect of drag, congestions and minor disorders are reflected upward to torture the brain. These people are chronic neurotics, always complaining, always uncomfortable. They may carry considerable intelligence, but the large proportion are sub-normal in one or more particulars, and where the person does possess a highly organized efficient brain, mental work is greatly embarrassed. These neurasthenics are unable to stand the normal amount of strain without a breakdown, early fatigue and irritability. Given proper nourishment and surroundings, however, they will beget normal healthy children. Since woman has "come into her own", as she expresses it, the strain on the physique has had its effect and there is seemingly an increasing number of mental breakdowns, due to the fact that the body given to the chromosomes has not developed sufficient strength to carry out the work and meet the ambitions of the mind's call.

Mystery grips every mind. In all countries, in all times, the mysterious and the inexplicable have bent the knee, but man's mind not grasping the Unknown, needs a symbol, and all religions provide it. Idolatry has always existed and always will; if not of clay or gold, of self. In the study of endocrines we find this tendency. We know so very little that it becomes interestingly mysterious and self is the symbol. We hold our own mirror and say we are superior.

#### ENDOCRINES.

In early biologic life we find a coöperation of tissue cells which can be explained only on the ground of some substance in its fluids which makes for harmony. Progressing up the scale we find accumulations of tissue, gland formation of the endocrine type. Further on, we find the sympathetic nervous system developed, having charge of the action and functioning of the more vital organs and viscera. Again, higher up, we have developed the spinal cord, then the brain, and, last of all, the anterior convolutions, particularly the third frontal, which we believe



today to be the centre of the highest mentality, and thank God we are not as the beasts. So it is seen that life with its 2 important phenomena, nutrition and propagation, can exist without any type of nervous system, the internal secretions of cells being sufficient for harmony. When Nature has once developed a perfect organ, she never loses it, so that in man as existing today we have the protection and aid of 3 types of coöperating tissue, the oldest and best developed and the most important being the endocrines, yet the least understood and of a nature which appeals very strongly to man's tendency to philosophize and carry his philosophy to absurdity. But some facts, however, seem explainable. Of the several glands we have 4 which are all-important; in the brain, the hypophysis, sometimes called the pituitary; in the neck, the thyroid; above the kidney, the adrenals; then, the gonads. Each of these gland masses is duplexed, 2 types of tissue having a somewhat different action, their action even today being but a clever surmise.

The hypophysis has control over the body growth from embryologic life on. It makes for bone, muscle, configuration and character, for it also controls the growth and action of the brain. A person with a properly acting pituitary gland will develop a wonderful physique, perfect in make, ready for work and a strenuous mental and physical life, with immense resisting power to disease and ability to recuperate. In early life, the gonads, particularly in the male, may antagonize the action of the pituitary, and, if they be strong in such action, growth of the body and size will be inhibited, and the brain and nervous system correspondingly developed. The hypophyseal in pure development give us our tall, athletic, sensibly-minded individuals, whereas the ones who have been antagonized by the gonads tend to be shorter, though quick, clever, individualistic, self-assertive, and often insinuate their minds in an obtruding way against the opinions of others. An important part of the pituitary seems to be to maintain an equilibrium of the electrolytes in the blood. These are the mineral salts which are fundamental factors in nerve energy. In the nucleus of the cells of the brain or body we find potassium; in the surrounding protoplasm, sodium salts. It is their interaction which produces what we call nerve force, i.e., electricity, which, in the cell may be motion, action, or intellection. This is controlled by the calcium in the surrounding fluid.

The adrenal is the gland for energy. We have energy from the hypophysis, but it is the energy of stability; that from the adrenal is for temporary purposes. Mental activity, whether intellectual or emotional, is energized by the secretion from the adrenal. Whether we run or fight, or are disturbed by fear and anxiety, or the body strives to combat disease, the adrenal is called upon. Exhaustion and debility in convalescence mean adrenal insufficiency. The terrible epidemic of 1918 was in truth an adrenal disease, which killed by destroying the adrenal cells. Its convalescence was protracted by fatty degeneration of these

same cells. The man of courage, the man who stands firmly on his feet for action has a good adrenal. The pacifist, the coward, the man of chronic indecision, the man who can do but little mentally or physically, has a small inefficient adrenal. There seems to be a correlation between the activity of the adrenal and intelligence. The child who is active, quick, full of physical energy, wearing out shoe-leather, is more apt to become a wonderfully intelligent, clear-minded, symmetrically-brained adult.

The thyroid also has a function of maintaining an equilibrium, that of iodine, most necessary in metabolism, as the great rôle of this gland is to balance metabolism. Metabolism means cell nutrition, the feeding of each individual cell of the body from the body fluids. In thought, and in action, mental and physical, the adrenal energizes, the thyroid metabolizes, and the liver produces glycogen in which it is stored. If the liver be healthy, if its cells readily store glycogen and deliver it promptly on call, we have a healthier condition of the system. If the hypophysis, the adrenal and the thyroid are competent we have a mentality of high degree. We have a body which in its reactions is ever ready to respond to the call from the higher centers for protection or action.

The gonads differ in the sexes, but in each sex there is a modicum of tissue of the other sex. Where the sex gland is more largely of its special type, its internal secretion will stimulate the body to develop and express its own sex type. The male gonad will evidence the male type strongly. It will side with the adrenal and hypophysis and develop a fighter, one who would conquer, whose ambitions soar and who succeeds, whether it be in mental, physical or conjugal life. The female gonad's internal secretion is purely the opposite. It sides with the thyroid. They coöperate. The thyroid and female gonad speak for the tender emotions, not to fight, but to submit; not to conquer, but to be conquered. The man desires and the woman gives. Their natures are opposites. The woman with a large, well-functioning ovary and a neck full of thyroid, (the Madonna type), is maternal in her instincts, abundantly affectionate, and emotionally religious. She fills our churches. The man with the colder organ, when associated with the adrenal and a neck with protruding larynx, and a thyroid not easily palpable, does not turn to religion, does not care as much for ceremony, and is more apt to admire than to worship.

But so-called "civilization", communal life, specialization and the vagaries of modern mentality, have had their reaction, and as the hypophysis makes a strong body, it needs a strong active life to maintain its development, so the man, who is made for soil and to sweat to obtain a livelihood, now sits on a stool, rides in a car, or has a mechanic do his work. The failure to call upon the glands for aid, leads to their alteration. Nothing is more vicious than the substitution of mechanical

apparatus for deep meditation, and some one has well said that "The world is dying by machinery".

If the hypophysis be perverted, fails in growth or in proper action, we have an altered mentality, weak conscience and inability to decide between right and wrong. From them we have the kleptomaniacs, the liars and the moral perverts of various types. If the adrenal be defective, we have the neurasthenic, the coward, the pacifist, the one who spurts on anger, only to exhaust quickly and not carry out the cause of determination. If the thyroid be disturbed, we have evidences of chronic fear or fright, excessive tissue changes and a mentality which is unstable, emotional, fickle and temperamental. If the gonad in the male has an excess of the tissue of the other sex, we will have the so-called "sissy" of a man, and vice versa, the "soubrette" in the woman, in short, physiologic hermaphrodites, a combination of the secondary physical and mental characteristics of the sexes. We cannot speak of the past, for we have no records, but our inference is that the modern easy life is developing this type. As all the glands are sending their hormones into the bloodstream for combined effect, it is impossible to accurately decide on the special action of any one because the potentiality of the others cannot be eliminated. We have clinical and experimental knowledge, as well as comparative anatomy, but there is little that we actually know, only reasonably surmise. As a man thinks, so will he act and speak. As he acts and speaks, so will he think. Character and the means for it reciprocate. Man being in the process of evolution, a perfect being is yet to be made, so, if through imperfect development character be weak in any way, the endocrines will miss their stimulus for hormonal action and a bad habit be instituted.

#### CALCIUM.

Calcium is a sedative to cell action and most important in early life in preventing waste energy through potassium and sodium interaction. As the body ages, the endocrines change and atrophy. The gonads cease their functioning. The calcium fails to be completely metabolized, and where it is normally found, more is deposited. The bones become brittle, the muscles stiffen, the arteries lose their elasticity, the heart responds slowly.

".....Age a mellowness doth set

On the green promises of youthful heat".....,

and the death of old age is of calcium, although more often, as Seneca says, "Man does not die, but kills himself."

#### PSYCHE.

The chromosomes, true to the miraculous impulse contained in them, have developed a body, a wonderful composite of cells and cell activity, biologically for the sole purpose of perpetuating itself, that is, the germ-plasm. So far as we know, man is the only animal that has more of an object in life than that of perpetuation. We cannot but believe that the



higher mental functions which seem to have their focus in the frontal convolutions, (particularly the third), mean that man is here for a second purpose. It is impossible to satisfy our minds with the thought that all mental activity, all the higher emotions and superb intellect given to man, are for annihilation. We cannot explain will-power, introspection, self-determination and lofty-minded thoughts, such as faith in God and man, by biochemical or electrochemical theories. There must be a psyche, a soul, a touch of the Divine in each of us.

#### HEREDITY.

Heredity versus environment is often discussed. Many argue that heredity is the stronger factor, others to the contrary. A true, perfect individual, one with the strongest and best mind for life's work is the one who is hypophyseal, whose physical and mental development has been largely under the influence of the hypophysis. He has a strong, symmetrical character, is little affected by environment, and is more apt to mold *it*. The man who does not respond well to his hypophysis, whose body tissues through inheritance fail to react properly, is the man of weaker intellect, the one who is influenced by his surroundings, and disturbed and bent by them.

#### MIND-SOUL.

The ancients placed the mind partly in the heart and partly in the abdominal viscera. In the Middle Ages the pineal gland was so honored. Only as recently as the eighteenth century was the seat of the mind felt to be in the cerebellum. Psychologists of the old school, as well as theologians, considered the mind, character and morals as something extraneous and for which each individual was responsible. It was up to him to drive his horses heavenward or assume the blame for failure. Modern psychology is more determinate. It shows that the brain is not the sole seat of the mind, but the workshop, that the knowledge of the true and beautiful comes through each one of the glands of internal secretion, as well as through the brain, and we cannot meditate and have judgment, and aspire and worship that which is best without them. Each tissue of the body, as well, is doing its part towards maintaining the entire body for reproduction and spirituality.

Man comes into the world with predetermined tendencies and dispositions. A body of intricate and imperfect mechanism, governed by Nature's laws, is grown for him. His soul or his mind must do the best it can with it, and through it satisfy all demands. We need but look among ourselves to find that different types of characters exist in each of us, but that the psyche acting through will-power, self-study, and firmness may control, although not completely alter, one's nature.

Man is but a chromosome homunculous, made for better or for worse by,

Heredity

Womb-fluids

Birth

Development

Hormones,

Calcium,

Crowned by a mind-soul

Hence our varied natures. If we err, we are relegated to the nether regions by the theologians; to the penitentiary by the jurist; and ostracized by the public. All of which is wrong, for in some degree we each and all are deformed in body and intellect and need help. The mother's knee, the associations of early life, and education, are all important in the molding and perfecting of moral character.

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## MENINGITIS AND BRAIN ABSCESS; A CLINICAL REPORT.

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The patient, W. C., a strong, well-developed man, 65 years of age, walked into the Jersey City Hospital and was first seen by the author February 26, 1925. He gave no history of illness previous to an attack of severe "lightening-like" pain in the left parietal region 1 month before admission, followed by continuing pain on both sides of the head but particularly about the left ear. For 3 weeks there had been a discharge from the left ear, and for this condition he had been receiving daily treatment by a general physician. One week before admission he had suffered a severe stroke involving the left side of his face and the left arm and leg, but the paralysis of the limbs had speedily disappeared. He denied ever having had syphilis. He was the father of 6 children, 3 of whom had died but not in infancy.

Examination disclosed perfect mentality, no dizziness nor vomiting, an exquisitely sensitive mastoid with swelling of the posterior canal wall, and the left eye fixedly open and weeping. Ophthalmoscopic examination showed a papillitis and papillo-edema of both eyes, with marked arteriosclerosis. The right pupil measured 2 mm.; the left 3 mm.

A simple mastoidectomy was performed, during which the dura was exposed and found to be normal. The bone over the lateral sinus was perfectly healthy. Isolated drops of pus were found throughout the rest of the mastoid, even as deep as the fallopian canal under the auditory canal. Every part was satisfactorily cleaned out and the patient returned to bed. The anesthetic was administered by Dr. Larkey and, except for a tendency to swallow his tongue, the patient's prospects seemed to be good. On the follow-

ing day there appeared to be a decided improvement in the facial paralysis, though the eye could not be completely closed.

On the following morning, about 11 o'clock, things began to happen; convulsions and coma supervened and by 2 o'clock the condition of Cheyne-Stokes respiration and Argyll Robertson pupils, caused the giving of a gloomy prognosis. Dr. Freile concurred in this opinion and I informed the family that the patient would probably die within an hour and was given written permission to make an autopsy on the head. However, he did not die at that time. A stormy week followed, with 4 days of noisy mania necessitating constant use of camisole restraint. Morphin had but little effect. On the fourth day he quieted down and became rational, with memory, will and judgment normal. We believed the man was suffering from cerebral abscess and meningitis, and if it had not been for the latter an attempt would have been made to drain the temperosphenoidal abscess. Dr. Haskins suggested waiting until the autogenous vaccine, which was then ready, had been given a chance and we have been grateful that this exploratory operation was left undone. The autopsy shows that had it been performed, it would have been done in vain.

The blood counts on 3 successive days showed leukocytosis of 19,000; 10,000; and 14,000; with polymorphonuclear percentages of 80, 75, and 86. The spinal fluid first came out under pressure, during the stage of compression. Both blood and spinal fluid were germ free. The diagnosis of temperosphenoidal lobe abscess was arrived at by exclusion; the sinus was free and innocent, and there had been no suggestive sinus temperature curve; there was no dizziness nor vomiting, projectile or otherwise; no occipital pain, all the pain being referred to the parietal regions; and, the retention of judgment, memory and will, freed the anterior lobe from suspicion. On the fourth day his temperature began to rise and after a semiconscious condition lasting through the fifth and sixth days, he quietly passed away.

The autopsy, performed by Dr. Butler, revealed the dura adherent over the cerebrum, especially in the left mastoid region, and the pia of both parietal regions thickened to the extent of more than a millimeter over an area of about 2 inches. The abscess, measuring about 2 inches in diameter, in the temperosphenoidal lobe, was an old one containing no fresh pus but filled with old, reddish brown, jelly-like substance, and the sac was absolutely brown. It was evident that cerebral degeneration had existed for months, and yet he had uttered no complaint and stated that he had not been sick until within the last month. It would seem that he must have had continuous headache for months but that he had grown accustomed to it. Brain substance has no sensation of pain but dura has, and he had a pachymeningitis for a long period of time as was shown by the thickened pia.



# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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## PUBLICATION COMMITTEE:

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Harrison S. Martland, M.D., Newark; Fred J. Quigley, M.D., Town of Union

Each member of the State Society is entitled to receive a copy of the JOURNAL every month. Any member failing to receive the paper will confer a favor by notifying the Chairman of the Publication Committee of the fact.

NOTE.—The transaction of business will be expedited, and prompt attention secured if,—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, Newark, N. J.

## THE LAST CALL.

When you receive this issue of the Journal the date set for the Annual Meeting of the State Society will be almost upon us. During each of the past 3 months we have urged upon you the desirability and the duty of attending this convention, but we feel it necessary to make this final appeal, or should we rather say, necessary to again call your attention to the opportunities and the obligations presenting. No member of the Society should miss this meeting if he can possibly avail himself of its privileges. You have already received an advance copy of the program and have thus been made aware of the excellence of its scientific features; a collection of papers by prominent members of the profession, covering a wide range of interesting topics. The social character of these gatherings is scarcely less important than their professional nature; there is an infinite amount of benefit to be derived from the "vacation" element and from the participation in comradeship. Lay off from your work for a few days. Attend the scientific sessions to learn what you may from the discussion of medical problems but, between times, "mix" with your fellows. This is an opportunity for what the business world calls "getting together", and you will find it helpful and beneficial in your future work. It will not only give you pleasure for the moment but it will do you good to meet your brethren from other parts of the state; better, perhaps, than that, it will do you an immense amount of good to get better acquainted with your neighbor, the confrère whose friendship you never have time at home to cultivate; he is a much better fellow than you think he is, and he will like you a lot better when he gets to know you more intimately.

Then, there is a third feature of these conventions that is highly important—the business sessions. It will be a delight to take part in the social functions and a profitable experience to participate in the ex-

change of views upon medical and surgical problems, but it is a duty, to yourself and to your local County Society, to share in the organization work of the State Society and in the transaction of such business matters as may be brought up for consideration. Do not leave this work for the traditional "George" to perform. Play your part, both as the recipient of benefits and the performer of necessary labors.

So, do not allow yourself to remain away from this meeting; do not attend the meeting and then neglect to take part in the proceedings; do not find yourself later in the position of complaining because of something that was or was not done and realizing that you might have saved the situation had you performed your full duty.

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### WORK OF OUR OFFICERS AND COMMITTEES.

At the Annual Meeting of the State Society, reports will be received from the several officers and chairmen of standing committees, covering the work of the passing fiscal year. Until such complete reports are presented, we may not anticipate the accounting of what has been accomplished but we feel that it will not be an unwarranted liberty to tell you now that those reports will contain much of interest to every member of the society and much that will be deserving of your thoughtful consideration.

Reading the published reports of other state societies, we have been impressed by certain apparent differences in the conduct of organization work. For instance, it is the rather general custom for the president and secretary of each state society to send messages of encouragement and of advice to the officers of the county societies, and to leave those officers and the district councillors to work out their own salvation. During the past year Acting President Donohoe and Secretary Morrison have pursued a different plan; i.e., that of personally visiting as many as possible of the county societies and discussing directly with the officers and members the work of the State Society and the particular problems of the local component organizations. Each of these officers has visited a majority of the counties (it was impossible to cover all of them), and it has been interesting to observe the effects of such visits; wherever they have gone there has been a resulting increase of interest in the plans and developments of the State Society and a prompt decision on the part of the County Society to assume its full share of the labor and responsibility. This plan is working most successfully and these officers deserve special thanks for the amount of time and energy they have given to the work of their respective offices.

Of the several committees to report, the most important, because of the general character of its work, is the Welfare Committee. Under the chairmanship of Dr. McBride, this committee has been a very busy

body and its chairman will doubtless suggest new activities for the coming year. We shall all be most interested to learn what is to be recommended regarding future medical legislation, as that is always a live topic, and without violating any confidence we may say here that the Welfare Committee is carefully restudying the entire medical practice act with a view to determining whether it needs further amending and, if so, in what particular. Every delegate should give thought to this matter and be prepared to discuss and to act upon any specific recommendations that may be presented, in order that we may in the future have united support for whatever course of action may be authorized.

One particular question very likely to arise is that of making further efforts to secure passage of the so-called "Doctor's Title" bill. You are all familiar with the happenings of the past 2 legislative sessions with reference to that bill. Unfortunately, there seems to have existed some misunderstanding, even within the ranks of the profession, regarding the purpose and the effects of this proposed amendment. The bill is not designed to confer any benefits upon the medical profession nor to deprive any licensed practitioner of medicine, nor any holder of a limited license, of any of the privileges or rights enjoyed under the existing law. The amendment is designed solely to protect the public against the misuse of the term "Doctor" in such manner as to mislead or deceive persons as to the qualifications of those who advertise to treat diseased conditions. This bill is not of vital importance to the medical profession; it is purely a measure for the further protection of those who may be ignorant of the facts or apt to be imposed upon by the specious advertising of charlatans.

The question for the State Society to determine will probably be, whether it is expedient and wise to continue now the efforts to pass this particular amendment to the Medical Practice Act, or whether it would be better to devote our energies to other equally important work and hold this in abeyance, along with other desirable amendments, until some more propitious moment for securing general improvement of the present law.

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#### PERIODIC HEALTH EXAMINATIONS.

At a recent meeting of the Board of Trustees, the editor was authorized to put into effect a plan submitted for the inauguration of Periodic Health Examinations through the State. He has now prepared 2 distinctive theses dealing with this matter and will be glad to present them upon request of the officers of any of the county societies. The proposition contemplates presentation of the first thesis at a meeting of the County Medical Society, to open discussion of the question from the professional point of view; the reasons for instituting these pro-



posed periodic examinations, the character of examination to be made, the business features of the proposal, and the necessity for some uniformity of action among medical men doing this work. Following such a meeting, it is intended that the second talk shall be delivered at public meetings arranged for and held under the auspices of the County Medical Society, or other medical organizations that would be recognized by the State Association; in this discourse an attempt is made to explain to the laity the many advantages to be derived from occasional health surveys and the reasons why such examinations should be made by the family physician. The Editor will hold himself in readiness to respond as promptly as may be to any county call for such services.

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### NEW JOURNAL FEATURES.

Mention was made in the May Journal of certain impending changes. If we may judge from the opinions so far expressed, the new cover meets with approval and the section devoted to "Observations from the Lighthouse" has become something more than an acceptable feature, for we have received so many favorable comments that we are induced to further develop that department as space permits.

One of the new features contemplated was the establishment of a department dealing with *professional ethics*, and we are pleased to announce that this column will be opened in the July Journal. It seemed highly important that such a department should be under the guidance of some member of the society who, like the famous Bayard, would be *sans peur et sans reproche*, and the active coöperation of such a one has been obtained to take charge of this department. His eminence in the profession, his ability as a writer of clear English, and the fact that he is so universally admired and respected, will insure the general acceptance of his pronouncements on ethics. A second feature was to be a department devoted to the consideration of what might broadly be called *professional economics*, and here again it was important to have the subject matter controlled by someone who would be recognized as being both conservative and progressive, whose judgment would be based upon the solid foundation of training and experience, and whose outlook would be into the future rather than upon the past. The names of these Associate Editors must be held in confidence for the moment.

We are of the opinion that heretofore too little attention has been paid by busy physicians to those general things outside of their own profession that pertain to beauty, taste, or the fine arts, and it is proposed to devote one column of the Journal to *esthetics*. If our first efforts in this direction should meet with your approval, the subject can readily be expanded to cover a variety of interesting factors.

## **Esthetics**

Concentration upon the matter in hand is a very essential factor in the physician's work, and this fact, applied to the different medical problems arising in rapid succession each day, very naturally leads to elimination or suppression of all other interests in life than those which directly pertain to professional labors. Unless the individual is of exceptional character, there is an almost irresistible tendency to fall into a limited routine of living and to gradually ignore the fact that there is anything else in life worth pondering on than those professional affairs that must so fully occupy one's attention. Such a narrow-minded state of existence is neither healthy for the physician himself nor beneficial to those whom he is called upon to serve, for that man who thinks that all the healing art is bound up in pharmacologic therapeutics and the mechanics of surgery is not a thoroughly capable practitioner of the science and art of medicine. It has always been regarded of the true physician that he should be broadminded, learned in many things, and possessed of a speaking acquaintance, at least, with all that goes into the making of a cultured person.

How large a percentage of the active, busy, so-called successful, practitioners of the present day are living up to this definition of what the true physician should be? How many of us are neglecting to cultivate the associated arts and sciences, permitting ourselves to be deprived of the stimulating influences of the "finer things" and under the excuse of being "too busy" are being caught in the maelstrom of professional rounds and are losing the opportunity to enjoy the good and beautiful things that surround us? As educated beings, we have probably the taste, natural or acquired, for the nice things and the pleasant things of life, but are we taking the time to gratify that taste and to enjoy our share of what our fellow laborers in the world are providing? We rather expect the educated layman and our brothers from other professions to know something of the modern advances in the field of medicine, and to use such knowledge profitably; but are we concerning ourselves about what is happening in other fields of labor, and to what extent are we profiting by the available blessings?

One might well ask himself: How many new books, nonmedical, have I read during

the past year; how many new plays have I witnessed; how many times visited the art galleries or attended the opera; how much music have I enjoyed during that time.... and since it is possible now to have a wide variety of music served in the home through instrumental aid and the radio, one might even ask, do I occasionally treat myself to a bit of classic music or am I content with the jazz that is practically inescapable.... and we do not mean to criticize jazz, because some of it is more than merely rhythmic, it is fascinating, and even in some instances quite artistic.

We are inclined to ask, after such introspection, what doth it profit a man to win a large practice, with its attendant benefits, if at the same time he must forego his share of the beauty and loveliness of life? It is because we feel that many of us are missing something of great value, through allowing ourselves to be submerged by the demands of professional work—we had almost said business—that we propose to call attention occasionally to developments in the fields of general literature, art, and music. This is not to be an "uplift" column, not in any sense of that word, but merely a department of the Journal in which we may attempt to direct the attention of busy men to the more important developments of the period in fields where they may find a bit of recreation, entertainment and instruction. Such short articles as are published will be merely of a suggestive character.

Perhaps we could not more propitiously inaugurate this department than by calling attention to the diversity of interests held by one of the greatest masters of medical practice, the late Sir William Osler. Everyone is familiar with his wide knowledge of general literature and is cognizant of his interest in everything pertaining to culture, in the best sense of that word. One can scarcely imagine a "busier" man than he—teaching in the University, conducting hospital bedside clinics, attending to an enormous consultation practice that required a great deal of travelling, writing textbooks, never missing a medical society meeting, local or national—and yet he was a patron of art and music and was actively engaged in public health work, finding time to participate in many public and private works for the advancement of civilization. In the April number of Scribner's magazine, there is a most entertaining article by Caroline Ticknor, depicting a little-known side of his wonderful life. Along with his professor-

ship at Oxford, Dr. Osler acquired the directorship of a small, endowed almshouse and to the care of the pensioners of that institution he gave the same energetic, thoughtful consideration that he devoted to every problem of life, regardless of its size or seeming importance.

Let us advise you to read that magazine article, not alone for the new side-light it will throw upon your beloved friend but, as well, for the inspiration you will derive from it.

Then, by way of contrast, turn to the latest "best seller" of the day—Sinclair Lewis' "Arrowsmith". Here is a book that every physician should read and read carefully. We are not going to review it for you nor to attempt the rôle of critic; we merely advise that you read and study it. If there was wisdom in the wish expressed by Robert Burns, for the power to see ourselves as others see us, here is an opportunity to hold the mirror for self observation, for we shall see several well defined types of the medicine man. The book presents a series of caricatures, and, like all caricature, a series of exaggerations, but with a due amount of discounting we may arrive at a reasonable photographic display of certain existing conditions. The book is worthy of your attention.

## Communications.

### MEDICAL SOCIETY OF NEW JERSEY, TREASURER'S REPORT, 1924. CAPITAL ACCOUNT.

Jan. 1—	
1000 Chicago & Alton 3½ % bond.	\$ 786.50
2000 1st Liberty Loan 3½ % bond.	2,000.00
2000 4th Liberty Loan 4¼ % bond.	2,000.00
8000 U. S. Treasury Certificates	
T. M., 1924 .....	8,000.00
2000 U. S. Treasury Certificates	
T. D., 1924 .....	2,000.00

\$14,786.50

Dec. 31—	
1000 Chicago & Alton 3½ % bond.	\$ 786.50
2000 1st Liberty Loan 3½ % bond.	2,000.00
10,000 4th Liberty Loan 4¼ % bond	9,935.00
2000 Certificates of Deposit, First	
National Bank .....	2,000.00
Cash Balance to current account..	65.00

\$14,786.50

### CURRENT ACCOUNT.

#### Receipts.

Balance, Jan. 1st .....	\$2,645.70
Assessments—Atlantic .....	\$ 200
Bergen .....	495
Burlington .....	220
Camden .....	500
Cape May .....	100

Cumberland ...	230
Essex .....	3,135
Gloucester ....	145
Hudson .....	1,720
Hunterdon ....	15
Mercer .....	595
Middlesex .....	185
Monmouth .....	340
Morris .....	355
Ocean .....	80
Passaic .....	845
Salem .....	110
Somerset .....	180
Sussex .....	100
Union .....	750
Warren .....	165
	<hr/> \$10,465.00
Interest .....	863.87
From Comm. on Arrangements....	137.07
From Comm. on Publication.....	4,993.05
U. S. Treasury Certificate paid....	8,000.00
	<hr/> \$27,104.69

#### Payments.

For Comm. on Arrangements.....	\$ 15.00
“ “ “ “ Credentials .....	108.50
“ “ “ “ Insurance .....	126.00
“ “ “ “ McKean Memorial.	405.00
“ “ “ “ Health in Educat'n	126.54
“ “ “ “ Publication .....	7,813.28
“ “ “ “ Welfare .....	3,934.63
“ Special & Minor Committees..	190.95
“ Board of Trustees .....	50.01
“ Judicial Council .....	137.00
Legal Expenses .....	1,177.60
Recording Secretary's Office .....	1,599.89
Treasurer's Office .....	67.85
Educational Secretary .....	1,433.01
Annuity .....	500.00
Printing & Stationery .....	495.20
Refund of Assessment to Bergen Co.	5.00
8000 Liberty Bonds .....	7,935.00
Accrued Interest on .....	143.56
BALANCE, December 31 .....	840.67
	<hr/> \$27,104.69

### NAMES ADDED TO THE OFFICIAL MEMBERSHIP LIST SINCE THE PUBLICATION, APRIL 5, 1925.

#### New Members.

Feit, Herman, Jersey City  
Miller, M. H., West New York  
Sherman, Byron G., Ralston.

#### Reinstated Members.

Ballinger, Reeve L., Arlington  
Behrens, Herman, Jersey City  
Binder, Joseph, Jersey City  
Butler, Vincent P., Jersey City  
Deary, Louis E., Bayonne  
Froomess, L. E., Newark  
Heilbrun, Julius, Jersey City  
Knox, Howard A., Bayonne  
Kolb, John M., West Hoboken  
Lupin, Edward E., Bayonne  
Marks, David M., Jersey City  
Mutchler, Raymond, Dover  
Nalitt, David I., Bayonne  
Norton, James F., Jersey City  
Poole, Vincent T., Edgewater  
Riha, William W., Bayonne  
Shapiro, Nathaniel J., West Hoboken  
Shipiro, Maurice, Bayonne  
Terk, A. R. West Hoboken



## Program of the 159th Annual Meeting, Medical Society of New Jersey, Haddon Hall, Atlantic City, June 18, 19 and 20, 1925.

### ANNOUNCEMENTS.

#### Credentials and Certificates.

The Committee on Credentials will meet at Haddon Hall on Wednesday afternoon, June 17, and on Thursday morning, June 18. Its office will be open at appointed times during the meeting.

The Constitution requires that all fellows, officers, annual and permanent delegates shall report and register with this committee.

Permanent delegates failing to register will be marked as absent by the Recording Secretary. Annual delegates must present to this committee a certificate of election signed by the president and secretary of their component societies. Without such certificate they cannot sit as members of the House of Delegates.

Every permanent delegate must present a certificate bearing the seal of the Society and signed by the Recording Secretary, and without such certificate he cannot register nor vote in the House of Delegates. Nominees for permanent delegates cannot register as permanent delegates until after their election by the Society, when they will receive certificates from the Secretary so that they can obtain their appropriate badges.

Certificates of nominees for permanent delegates must follow the special form given in the Constitution on page 12. They should be sent to the Recording Secretary at least one week before the meeting, so that the names may be presented to the Society for election.

Each member of the Nominating Committee should present his certificate to the Recording Secretary before the opening of the afternoon session so that the names of the Nominating Committee may be announced as indicated on the program. The Nominating Committee will meet on Thursday, June 18, at 5:30 p. m. in the committee room.

#### Papers and Reports

All papers read before the Society or appearing by title on the program, whether read or not, thereby become the property of the Society. The author of each paper is required to give the Recording Secretary a legible copy of the same BEFORE reading. The expense of alterations in a paper after it is in type, and the cost of illustrations, is borne by the author. All manuscripts should be typewritten, double spaced, and on one side of the paper only.

Excepting orations and the addresses of the President, the time to be occupied in the actual reading of a paper is limited absolutely to 20 minutes. Those opening the discussion are allowed 10 minutes each, others 5 minutes each.

All members of component societies who are in good standing are entitled to sit as as-

sociate members and have the privilege of discussing papers in the general session, but have no vote nor the right to take part in the discussions of the House of Delegates.

All sessions will be opened promptly at the hour set, in order that the program may be carried out as planned.

The Board of Trustees will meet at Haddon Hall, Wednesday, June 17, 8 p. m.

Committees or boards desiring meeting rooms will please notify the Committee on Arrangements, M. W. Reddan, Chairman, or W. D. Olmstead, Secretary.

#### Railroad and Hotel Rates.

Secretary Morrison has secured convention rates from the railroads. "This reduced fare can only be obtained by asking the railroad agent at your station for a certificate, at least half an hour before train starts."

The rates at Haddon Hall, on the American plan, are:

Rooms with running water—

1 person, \$6.00 to \$8.00 per day.

2 persons, \$12.00 to \$14.00 per day.

Rooms with bath—

1 person, \$10.00 per day.

2 persons, \$14.00 to \$20.00 per day.

#### Exhibits.

Exhibits of instruments, books, pharmaceutical preparations, x-ray apparatus, etc., will be shown in the Ground Floor Exchange of the hotel and members are urged to avail themselves of this opportunity to examine the very latest improvements in these various departments.

#### Thursday, June 18, 1925, 10 A. M.

Call to order.

Invocation.

Report of Committee on Credentials, W. J. Carrington, Chairman.

Reading of Minutes of 1924 meeting.

Report on Permanent Delegates.

Nominees for Permanent Delegates.

Election of Permanent Delegates.

Reports of Officers and Committees.

#### Thursday, 2:30 P. M.

Surgical Surprises,

Walter P. Glendon, Bridgeton, N. J.  
Cancer of the Bladder and Its Treatment,  
J. Thompson Stevens, Montclair, N. J.

Discussion, Joseph Wyatt, Newark, N. J.

#### Meeting of the House of Delegates.

Unfinished business.

Report of Business Committee.

Miscellaneous business.

Reading of the names of the Nominating Committee.

**Thursday, 8:30 P. M.**

In Vernon Room

Oration in Medicine,

Dr. John A. Kolmer, Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania.

Play Hours of Busy Physicians,

Illustrated by Natural Color Photography.

Henry O. Reik, Editor of the Journal.

Informal Dancing.

**Friday, June 19, 1925, 9 A. M.****Meeting of the House of Delegates.**

Unfinished business.

Report of Welfare Committee, Andrew F. McBride.

Report of Business Committee.

**Friday, 10 A. M.**

Negativism in the Child,

Joseph H. Marcus, Atlantic City, N. J.

Discussion, Julius Levy, Newark, N. J.

The Treatment of Functional Mental Disease,

Henry A. Cotton, Trenton, N. J.

Discussion, H. B. Costill, Trenton, N. J.; George Sexsmith, Bayonne, N. J.; Hanson V. Ogilvie, Atlantic City, N. J.

The Causation of Chronic Joint Disease,

Sidney A. Twinch, Newark, N. J.

Discussion, Otto Lowry, Newark, N. J.

**Friday, 2:30 P. M.**

Report of Nominating Committee.

Election of Officers.

Modern Cardiology from the Standpoint of the General Practitioner,

Harvey M. Ewing, Newark, N. J.

Surgery of the Larynx,

Henry B. Orton, Newark, N. J.

Discussion, Gabriel Tucker, Philadelphia, Pa.; Henry C. Barkhorn, Newark, N. J.

Surgery of Diseases of the Chest,

Richard H. Dieffenbach, Newark, N. J.

Discussion, Francis R. Haussling.

Unfinished Business.

Report of Business Committee.

**Special Notice.**

There will be a conference of the Treasurers and Secretaries of the Component Societies with the President, Treasurer and Recording Secretary, at the close of the afternoon session of the House of Delegates, Friday, June 19.

**Friday, 8:30 P. M.**

In Vernon Room.

President's Address, Lucius F. Donohoe.

Oration in Surgery,

Dr. John Frederick Erdmann, Professor of Surgery, New York Post Graduate Medical School.

Dancing, Dr. Samuel Barbash in charge.

Light Refreshments.

**Saturday, June 20, 1925, 9:30 A. M.**

Some Observations Concerning Hypotension, Thomas K. Lewis, Camden, N. J.

The Hemopoietic System, Its Functions and Diseases, Lantern Slides.

Harrison S. Martland, Newark, N. J.

Discussion, E. Libman, New York City.

Treatment of Rhus Dermatitis with Poison Ivy Extracts,

Ralph O. Clock, Pearl River, N. Y.

Discussion, Chas. H. Purdy, Jersey City

**Meeting of the House of Delegates.**

Unfinished Business.

Report of Business Committee.

Miscellaneous.

**Saturday, 2:30 P. M.**

Meeting of House of Delegates, session at call of President.

**Entertainment for the Ladies.****Thursday Afternoon, June 18, 1925, 4:45.**

Tea and Recital in main lobby of Chalfonte.

**Thursday Evening, 8:30 P. M.**

In Vernon Room.

Oration in Medicine,

Dr. John A. Kolmer, Professor Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania.

Play Hours of Busy Physicians,

Illustrated by Natural Color Photography.

Henry O. Reik, Editor of the Journal.

Informal Dancing.

**Friday, June 19, 1925.**

10:30 A. M. Sightseeing Tour of Absecon Island in Mack Palace Buses from Had-don Hall.

3 P. M. Bus trip to Inlet and yacht trip.

Return to hotel by buses.

8:30 P. M.—In Vernon Room.

President's Address,

Lucius F. Donohoe, Bayonne, N. J.

Oration in Surgery,

Dr. John Frederick Erdmann, Professor of Surgery, New York Post Graduate Medical School.

Dancing, Dr. Samuel Barbash in charge.

Light Refreshments.

Coupon books containing the following coupons will be issued to every lady registered:

1. Rolling chair coupon good for two people at any Shill Rolling Chair Station, June 18th, 19th or 20th, 1925, for one hour ride.
2. Life Guard Drill.
3. Hygeia Pool.
4. Steel Pier admission ticket.
5. Moving picture theatre admission ticket.
6. One sightseeing bus tour of Absecon Island.
7. One bus ride to Inlet and yacht trip. Visits to Children's Seashore Home. Visits to Atlantic City Hospital.

Members of the Atlantic City Associate Committee on Arrangements:

Dr. W. Blair Stewart, Chairman.

Dr. Samuel Barbash.

Dr. D. Ward Scanlon.

Dr. Wm. E. Darnall.

Dr. Clarence Andrews.

Mrs. Samuel Barbash.



## Observations from the Lighthouse

*In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.*

### Empyema.

With a view to ascertaining what factors cause the difference between empyema in children and in adults and how results of treatment may be improved, a study was made of 268 cases in which the patients were operated upon by the observers, (William E. Ladd and George D. Cutler, Surg., Gynec. & Obst., 39:429, Oct. 1924). Of the 268 patients, 42 were operated on by the closed method, with a mortality of 28%. Of these 42 cases in which intercostal drainage was used, 50% required secondary operation, but, fewer deaths resulted from the secondary operation than from simple closed drainage, the mortality in 21 cases being 9.5%. Rib resection was performed for 226 patients, with a mortality of 15.9%, and in this group only 4% required a secondary operation for obliteration of the cavity. There were 48 children under 2 years of age, among whom the mortality was 35.41%; it was much higher in the infants under 1 year of age.

In this series of cases, 160 patients had a pneumococcus infection, showing a mortality of 15.62%, and 35 patients with a pure streptococcus infection, with a mortality of 28.57%. In a group with miscellaneous infections (Staphylococcus pyogenes aureus, streptococcus and pneumococcus appearing in combination with each other or with some other form of bacteria) the mortality was 14.81%. The mortality in empyema is very high if operation is performed during the synpneumonic stage. Under these conditions thoracentesis should be practiced as a temporary measure, more thorough drainage being reserved until the metapneumonic stage has been reached; on the other hand, it is unwise to postpone operation until the patient is wasted from prolonged sepsis.

Ambrose Lockwood (Canad. M. A. J., Montreal, 14:941, Oct., 1924) calls attention to the fact that the incidence of acute empyema is about 3 times as great in males as females and, except in traumatic cases, is as yet beyond the control of the medical attendant. Apart from postural rest, inclining the patient on the affected side, or limited strapping of the involved side, the chest should not be tampered with in the developing stage of the disease; aspiration for diagnosis is rarely necessary. Guided by the elevation of tempera-

ture, pulse and respiratory rate, the degree of dyspnea, the displacement of the heart, and the toxic condition of the patient generally, aspiration should be delayed until the fluid is well walled off and the lung about it firmly adherent to the chest wall. If aspiration is employed therapeutically it should be resorted to at least every 36 hours, depending upon the febrile action of the patient. Intercostal incision or rib resection for drainage should be employed only after repeated aspiration or some form of closed drainage has failed to cure the disease. Chronic empyema must be looked upon as the disastrous sequel of a mismanaged acute empyema. Radical interference with a chronic empyema cavity should be undertaken only after palliative measures have failed to obliterate the cavity. Our aim should be to bring the collapsed lung out to the chest wall rather than to collapse the chest wall toward the lung, and above all we should constantly keep in mind that a combined mortality of more than 2% is not due to the disease per se, but in most instances to too early, too radical or injudicious interference by the medical or surgical attendant.

Alfred J. Grant, (Canad. M. A. J., Montreal, 14:938, Oct., 1924) directs attention to early recognition of empyema as the most important factor in the treatment of that disease. There is no one line of treatment applicable to all cases. In the presence of frank pus, adequately walled off by adhesions, the considerations for treatment are summed up in adequate drainage properly maintained. Until adhesions form, the best results may be obtained by aspiration to remove sufficient fluid for relief of symptoms, and this followed by drainage through a rib resection. As general anesthetics are badly taken in this condition, he prefers local anesthesia. The superficial injection of novocain, 0.5% with suprarenin 1:100,000, may be used to map out a rectangular area of skin over the portion of rib to be resected. Deep injections are then made in the intercostal spaces above and below the site of resection, 2 anterior and 2 posterior to the portion of rib to be removed; these deep injections are carried right down to the pleura, and a liberal quantity of the solution is used so that both branches of the intercostal nerves will be included in the field of anesthesia. After a wait of 5 minutes, the first cut through the rib may best be made with a sharp, thin chisel. Once a break in the contour of the rib is made, the shears may be used for removal of the bone and then the pleura may be incised quite painlessly. Insertion of a good sized rubber tube, covered with ordinary absorbent dressings, completes the operation.

The effects of irrigation with surgical solution of chlorinated soda in acute and chronic empyema have been recently studied by Franklin A. Sevens (J. A. M. A., 83:1495, Nov. 8, 1924) who says that when neutral solution of sodium hypochlorite is employed for the irrigation of empyema cavities the results may be manifested in 3 ways: (1) The cavity becomes sterile more quickly than if treated by simple drainage without irrigation; (2) the wound is cleansed and the exudate is removed; (3) the excess scar tissue over the lung surface is dissolved, allowing



the lung to expand and obliterate the cavity. When the solution is properly prepared and contains the proper percentage of available chlorin, these results are obtained almost solely through the action of the chlorin liberated; when the chlorin available is less than 0.4%, the antiseptic and solvent effects are not sufficient to bring about the desired results. For this study, 2 groups of empyema cases were selected; all of the cases followed streptococcus pneumonia but the treatment varied. The first group of 34 cases were chronic when Carrel-Dakin treatment was begun. Resection of a rib with simple drainage was employed but, after an average mean period of 90 days, Carrel tubes were placed in the wounds and irrigation was performed at intervals of 3 hours until healing occurred. The average time that elapsed in these chronic cases between the beginning of irrigation and the disappearance of hemolytic streptococci from the wounds was 73 days. This was approximately half the interval which elapsed between the inauguration of antiseptics and the final healing. In the second group of 28 cases, irrigation was started as soon as practicable after rib resection, an average of 9 days following the operation. The average interval before these cavities were sterile was 42 days or slightly less than half the average number of days elapsing between the operation and the final healing.

It is evident from these figures that, aside from the chronicity of the cavity, the presence of hemolytic streptococci definitely deters healing and regardless of the stage of empyema in which Carrel-Dakin is begun, the period required for healing after irrigation is instituted is approximately twice that required for the sterilization of the cavity; this is true not only when the cases are arranged in groups according to their chronicity, but holds good within these selected groups as well. In comparing the groups of acute and chronic cases, Stevens found that in the chronic cases the interval between the time when antiseptics was begun and the sterilization of the cavity was effected, and the interval between sterilization of the cavities and healing of the wounds, are longer than similar intervals in the more acute group. Pleurapulmonary fistulas and hemorrhage have been the only contraindications to immediate antiseptic therapy. Continued irrigation of chronic cavities resulted in a marked decrease in the size of the cavities, and both the percentage of recurrences and the percentage of thoracoplastic operations necessary were decreased by irrigation with surgical solution of chlorinated soda.

By way of comparison, it is interesting to read a report by Sven Lundberg, (*Acta chir. scandinav.*, Stockholm, 57:451, Oct. 18, 1924) on 25 cases of chronic pleural empyema treated by irrigation with Dakin's solution followed by the application of Morison's bipp paste. This group of cases included 11 with fistulas of the thoracic wall and most of these patients had been previously treated by irrigation until the cavity was reduced in size and the fistulas could be filled with the paste. The following figures indicate the time elapsing in these 11 cases between thoracotomy and the bipp treatment and, in brackets, the time re-

quired for healing: 1½ months (5 days); 1½ months (30 days); 2 months (4 days); 2½ months (14 days); 2½ months (9 days); 3 months (5 days); 3½ months (7 days); 4 months (3 days); 4 months (sequestrum); 5 months (11 days); 11 months (sequestrum). There were 9 cases of empyema cavities without bronchial fistulas. The irrigation, which formed the essential part of the treatment in these cases, always resulted in contractions of the cavities: 1 cavity was reduced from 300 c.c. to 70 c.c. in 1½ months; others from 100 c.c. to 30 c.c. in 1 month; from 400 c.c. to 50 c.c. in 3 months; and from 300 c.c. to 45 c.c. in 2 months; in 1 case the cavity measured 350 c.c. 4 months after thoracotomy and was reduced in 3 months to 200 c.c. where it remained stationary. In 2 cases healing was effected by irrigation alone; in the others, the treatment was completed with bipp paste. In a group of 5 cases of empyema cavities with bronchial fistulas, no irrigation worth mentioning could be carried out because of the attacks of coughing to which it gave rise. In 4 cases the figures indicating the time elapsing between thoracotomy and bipp treatment and, in brackets, the time required for the healing of the thoracic and of the bronchial fistula are as follows: 4 months (11 and 7 days); 4 months (5 and 8 days); 10 months (40 and 7 days); 27 months (15 and 11 days). With the exception of 1 patient who died after 4 months, of meningitis, and 1 who could not be traced, all patients continued in good health and their fistulas remained closed during periods of observation ranging from 6 months to 3 years. Transitory symptoms of iodine intoxication were observed in 2 instances.

H. Scherz, (*Arch. f. klin. Chir.*, Berlin, 131:361, Sept. 23, 1924) calls attention to the "cork-suction method" as a promising measure of treatment. In principle, it is a rib resection with emptying of the pus by furthering negative pressure. The apparatus consists of a rubber cork which is bored through the center with a glass tube bent at a right angle, a hand pump, a drainage tube and a suction flask. The end of the glass tube to be introduced into the pleural cavity is fenestrated, and the other end is connected with the drainage tube. In order to ensure airtight fastening of the cork to the wall of the thorax, he has devised a fastening that consists essentially of a metal plate provided with 2 wide openings for the attachment of a tape. The plate projects beyond the base of the cork and when it is pressed down by means of springs at the sides the pressure is transmitted to the base of the cork and the cork is pressed into the opening in the thorax. This method is said to have the advantage that dressings are never soiled and that the differential pressure is kept up continuously; also, it is claimed to produce results quickly and reliably.

Horace Binney, (*Boston M. & S. J.*, 191: 1206, Dec. 25, 1924) reports upon the study of 100 cases of empyema treated by the closed method, the majority of these patients having been seen in a special pneumonia service prior to January 1, 1923, so that a fair period of time has intervened for follow-up work. In this series there were 13 deaths following opera-

tion. Of the patients who recovered, 68 were pronounced healed; 19 had a discharging sinus or a small granulating wound; in 3, failure to heal was the result of bronchial fistula. Of the 68 cases healed, further trouble developed in but 2. Of the group of 19 incompletely healed: 2 have not been traced; 9 reported by letter or showed upon examination that healing had taken place within 3 weeks; 5 healed within 10 months; 2 because chronic; 1 died from miliary tuberculosis and myocarditis. The average stay in hospital after operation was 55 days. The chief criticism of closed drainage with comparatively small tube is that it is inadequate for the removal of fibrin clots, and therefore unsurgical, but with the help of Dakin's fluid irrigation the fibrin was removed in these cases without difficulty except in 1 instance. The mortality among patients operated on in the first and second weeks following development of effusion was 25%; in those treated during the third week or later, it was 11.3%. Secondary operation was required in 21 cases.

Regarding technic, Binney advises the use of local novocain anesthesia, with paravertebral injection as well in cases of rib resection, to insure anesthesia of the periosteum. The cavity should be emptied slowly, depending upon the amount of tension. Attention to diet and the providing of abundance of air and sunlight are important factors in after treatment. As soon as the condition warrants, the patient should be instructed to blow "Wolff Bottles", to assist lung expansion.

W. L. Harris (Med. J. & Rec., 120:590, Dec. 17, 1924) reports the closure of a bronchial fistula of 12 years' standing, by the use of radium. In a man 45 years old, rib resection and pleural cavity drainage were employed for the treatment of postpneumonic empyema and during a period of more than 12 years thereafter drainage persisted, with occasional dry intervals. At times it was necessary to explore the pleural cavity, and fistula opening into the bronchus was then in evidence. Within a period of 10 weeks, about 4200 mg. hr. radium treatment were given, directed at different portions of the sinus, and within 4 months the thickened scar tissue had disappeared. The sinus, which measured about 7 in., gradually closed and the patient remained well for a period of 18 months that he continued under observation. The author believes that the patulous bronchus was responsible for the many years of drainage from the pleural cavity, and that, following the destruction by radium of the endothelial cells lining innumerable capillaries in the pulmonary tissue surrounding the ruptured bronchus, (thus transforming the capillaries into fibrils, which automatically contract) the opening into the bronchus was occluded.

Fritz Klinge (Deutsch. Ztschr. f. Chir., Leipzig, 189:241, Dec., 1924) relates a series of cases of closed residual empyema following pulmonary fistulas. There were 5 cases not related to tuberculosis, but occurring after puerperal pulmonary infarction, pneumonia, gunshot wound, appendiceal peritonitis, and phlegmon of the knee-joint. The duration of the chronic process varied between 8 months and 12 years, and all cases had been treated for a considerable time as instances of "pul-

monary suppuration" (abscess, bronchiectasis, tuberculosis). Characteristic features of this condition are retraction of the wall of the thorax and contraction of the ribs, both of which are rarely extreme in lung abscess and bronchiectasis. Roentgen examination and exploratory puncture should confirm the diagnosis. In the way of treatment, simple thoracotomy is generally not sufficient, but thoracoplasty is indicated, moderate or extensive, according to the extent of empyema, and this is to be followed by attempted expansion of the lung through positive pressure respiration.

## Deaths.

PIERSON, Henry Morton, of 115 Fifth Avenue, Roselle, New Jersey, died May 6, 1925, at the Elizabeth General Hospital, following prolonged illness.

Dr. Pierson was born in Roselle, December 30, 1878, and was the son of Dr. Henry Chatfield Pierson of the same city. He had practiced medicine in his native town since the completion of his service as an army surgeon. He was a member of the staff in the St. Elizabeth and the Elizabeth General Hospitals.

At a special meeting of the Union County Medical Society, held May 7, the following resolutions were unanimously adopted:

"Be it resolved that we record on the minutes of the Society and in the public press the esteem and affection in which Dr. Henry Morton Pierson was held by us. Dr. Pierson was a devoted husband and father and of deep loyalty to his friends. As a physician he ranked high. His professional attainments were recognized by his brother practitioners and by his patients, by the latter of whom he was greatly beloved.

His genial presence, good fellowship, valued counsel and advice will be greatly missed. His memory we will hold in affection and reverence. To the bereaved family we desire to express our deep and heartfelt sympathy.

Signed for the Society.

George W. Strickland, M.D.

J. S. Green, M.D.

M. A. Shangle, M.D.

WARREN, George L., 77 Houston Street, Newark, N. J., was stricken by a heart attack while riding in the trolley car May 21, and died on the way to the City Hospital.

Dr. Warren was born in Warwick, New York, December 16, 1874, and received his early education in the public schools of Newark, his parents having settled in that city when he was a very young child. Graduating in medicine from the College of Physicians and Surgeons of Columbia University, he practiced in Newark and took a very active part in public affairs, serving as County Physician since May 6, 1916. Dr. Warren was a member of the Essex County Medical Society, the New Jersey State Society and the American Medical Association. He was also a member of the Chamber of Commerce, the Eureka Lodge, F. & A. M., the Alamo Council, Royal Arcanum, and the Newark Lodge of Elks.



## In Lighter Vein

**Juggling With Life and Death**—A man with an uncanny mania for juggling with figures produced pencil and paper and said to a friend: "Put down the number of your living brothers. Multiply it by two. Add three. Multiply the result by five. Add the number of living sisters. Multiply the result by ten. Add the number of dead brothers and sisters. Subtract one hundred and fifty from the result". The friend did it. "Now," said the other with a cunning smile, "the right-hand figure will be the number of deaths, the middle figure the number of living sisters, and the left-hand figure the number of living brothers." And so it was.—Tit-Bits (London).

A telephone operator says she is able to keep patient only through reading the Bible. Other operators should follow suit. We recommend Numbers.—Detroit News.

An investigator claims that half the people in the world are half crazy. A perusal of the daily papers makes one wonder how he arrived at so conservative and optimistic a conclusion.—Southern Lumberman.

**Vain Self-Denial.**—A bishop was eating dinner with his host before the afternoon service at which he was to speak. He ate little or nothing, explaining that it was not good for a preacher to eat heavily before a sermon. The housewife could not attend the service, as she had to stay at home and prepare supper. When her husband came home, she said, "Well, how was he?" The husband, drawing a sigh, replied, "He might just as well of 'et."—Christian-Evangelist.

**Only the Shell.**—The pastor who was fond of figures of speech was making a funeral oration. He began his address, "Friends, we have here only the shell of the man, the nut is gone."—The Churchman.

### Preparedness.

"You say," repeated the druggist, "that you want a quarter's worth of candy and a nickel's worth of stomach-ache medicine?"

"Yes, sir," replied the small boy, "an' mix 'em, please."—Am. Legion Weekly.

### I May Be.

Poor, but it costs little to keep clean.

Unlucky, but I need not add the misfortune of self-pity.

Homely, but at least I can have a beautiful smile.

Clumsy, but I need not cultivate rude speech.

Down, but I am never out until I admit it.

Discouraged, but the world begins all over again in the morning.—Medical World.

**Scratching the Record**—"Your daughter talk a great deal, doesn't she?"

"Yes, I think she must have been vaccinated with a phonograph needle."

## County Society Reports

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The stated monthly meeting of the Atlantic County Medical Society was held at the Hotel Chalfonte Friday, May 8, 1925, with the president, D. Ward Scanlan, in the chair.

Dr. W. P. Conaway, reporting for the Board of Censors, stated that the application of Dr. S. Stalberg was approved, and this candidate was duly elected to membership.

Dr. Clarence L. Andrews, chairman of the Committee on Arrangements, urged members to lend every effort in procuring sufficient material for the diagnostic clinic which is part of the program for the American Medical Association session.

Dr. Philip Marvel, Sr., read a communication from the State Society regarding a new Constitution for that organization and a letter which he had sent to each County Society Secretary. This last communication referred to the number of delegates, annual and permanent, of the different county societies, and disapproved of the present inequalities. Therefore, it was moved by Dr. Marvel, and properly seconded, that the Atlantic County Society recommend that Section 4, Article 4 be deleted from the present constitution; that there be established a more uniform and equal method of appointing representatives of the different County Societies; and, that it be considered advisable to eliminate the provision for permanent delegates. The motion was adopted.

Dr. J. H. Mason was appointed Chairman of Arrangements for the outing of the society to be held in June.

The scientific program was opened by Dr. W. Wayne Babcock, of Philadelphia, his subject being "Local Anesthesia in Minor and Major Surgery".

In a brief review, Dr. Babcock outlined the retrospect of local anesthesia commencing 100 years ago, when Wardrop attempted an operation on the eye, inducing anesthesia by pressure on nerves and vessels adjacent. Dr. Babcock illustrated his subject with graphic tabulations embodying the many phases of local anesthesia such as duration, pulse rate, blood pressure, influence of position in spinal anesthesia, and the influence of pituitrin and adrenalin. The following drugs were studied and used: eucain, 5%; eucain lactate, 5%; procain, 8%; tropococain, 5%; alypin, 5%; stovain, 4%; cocain, 2%; butyn, 2%.

In scalp anesthesia, the author stated that a favorable aspect is the resultant ischemia that follows. Trifacial nerve blocking is best accomplished through the gasserian ganglion and, referring to the neck, it was stated that this region is easily anesthetized. He urged freer use of anesthetizing solution as being instrumental in stimulating patients during operation. Many and varied operations were illustrated and the advantages of nerve blocking pointed out.

Relative to pus in the abdomen, Dr. Babcock stressed the importance of a minimum amount of interference, avoiding local blocking in diffused peritonitis. In closing his topic,



Dr. Babcock said that, generally speaking, most operations can be carried out under local anesthesia, and he believed that in the ensuing 10 or 15 years there will be a demonstrable increase in its efficiency.

In discussing this presentation, Dr. Theodore Senseman questioned the ability of the average surgeon to do spinal and local anesthesia properly. He felt that this type of specialist in anesthesia should be developed, following certain channels of study; however, at present if there are no contraindications to general anesthesia he did not see a marked advantage in using spinal anesthesia. He complimented Dr. Babcock as being one of the pioneers in this field and in demonstrating such great skill in his procedure.

Dr. David B. Allman, in discussing Dr. Babcock's paper, referred among other things to the question of mortality; also the contraindications and the advisability of injecting large amounts of a weak solution.

Dr. Babcock, in closing the discussion, said that any operator can use massive block anesthesia, and urged the freer use of the solution without apprehension, as for example: in 1% novocain it is almost impossible to administer too much, as 20 to 22 ounces had been used by him on more than one occasion. He cautioned the operator to keep free from blood-vessels in making injections. Butyn is a dangerous drug to use, as it induces a low blood pressure, its selective action centering on the vasomotor fibers.

The scientific program was continued by Dr. Robert Kilduffe, Director of Laboratories at the Atlantic City Hospital, his subject being "A Specific Test For Syphilis; A Resumé of the Present Status of Kolmer's Complement Fixation Test". (This will later appear in full in the Journal).

Dr. Kilduffe's admirable presentation was discussed by Dr. C. H. Shivers, and H. T. Harvey; the latter, being a classmate of John Kolmer's, detailed a brief biographic sketch of the scientist, paying him a splendid tribute.

Atlantic City Hospital Staff.

Joseph H. Marcus, M.D., Reporter.

The monthly meeting of the Atlantic City Hospital Staff was held on the evening of April 24, 1925, at the Hotel Breakers. The meeting was called to order by President W. C. Wescott. The minutes of the previous meeting were read and approved.

Dr. James H. Mason was appointed chairman of the committee for the annual May outing, which is to be held on the usual meeting day, Friday the fifteenth, at the Linwood Country Club.

The Scientific Program was opened by Dr. J. H. Mason with a report of Dispensary Service for 1924. During the year over 4000 accident cases were treated, clearly demonstrating the need of a separate and distinct department for accident work. The total number of new patients for 1924 was 7713, and the number of revisits for a like period 7312; in all 15,025 cases were treated, which compared to 1925 showed an increase of 1287 cases or approximately 10%.

1924 NEW DISPENSARY CASES.

Accidents	4069
Surgical	1452
Medical	748
Pediatrics	271
Obstetrics	289
Gynecology	103
Laryngology	341
Otology	189
Ophthalmology	251

Total new cases 7713

The program was continued by Dr. Clarence Andrews, who presented a paper entitled "Interesting Observations in Wood Alcohol Poisoning Cases". (This paper will be published later in the Journal).

In discussing Dr. Andrews' paper, Dr. Harley mentioned that the action of wood alcohol is variable and affects individuals in different ways. He reported a case of alcohol poisoning that occurred in a furniture finisher.

Dr. Samuel Barbash reported a case of methyl alcohol poisoning in which a thrombosis of the distal part of the axillary artery occurred. As a complication, gangrene resulted and it was necessary to resort to amputation 2 inches below the elbow.

Dr. Otis Stickney, speaking of eye symptoms, believes that certain individuals are more sensitive in their reactions, some requiring but a few drops in order to produce blindness. He also feels that the type of atrophy is a primary one and not of nervous origin.

Dr. Wescott spoke of wood alcohol poisoning that occurred in Baltimore some 20 years ago, in which the causative factor was spirits of Jamaica ginger purchased at grocery stores.

Dr. D. W. Scanlan outlined certain aspects of prohibition in its broader phases, and Dr. Andrews closed the discussion.

Dr. Robert Kilduffe reported on the activities of the laboratory and discussed various phases of laboratory procedure with certain recommendations. He emphasized the indications for transfusion and requested examination of pus in all cases and also spoke of the advisability of obtaining coagulation time of the patient a day or two before the operation especially in tonsillectomies. He reported that the emergency outfits for urinary examination had been placed on each hospital ward. A general discussion followed, after which the meeting adjourned to the dining room.

BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Bergen County Medical Society was held at the Hackensack Hospital on the evening of May 12, with 60 members and guests attending. Before the Scientific Program was opened, Assemblyman Chandless undertook to explain his position in regard to the defeat of Senate Bill No. 132. His talk was hard to follow and his defense not at all clear.

Dr. A. O. Whipple, Professor of Surgery at Columbia University and Director of Surgical Service at Presbyterian Hospital, New York, was introduced and read a paper on "Purpura

Hemorrhagica and the Results of Splenectomy". (His paper is promised for a later issue of the Journal).

Dr. Fordyce St. John, Assistant Professor of Surgery, Columbia University, and Attending Surgeon at the Presbyterian Hospital, followed with a paper on "A study of Gastric and Duodenal Ulcer". This study was made particularly from the point of view of the significance of hemorrhage in relation to treatment. In 200 cases of gastric and duodenal ulcer, 37% gave a history of hemorrhage; in 12% it was grave and in 3.5% fatal. In the light of recent pathologic study, prevention is possible in some cases. It is essential to determine early the type of ulcer. Where there is definite loss of wall structure with bleeding, therapy consists in removal of the ulcer and ligating the bleeding vessels; delay of surgery is dangerous in such cases; removal of the ulcer-bearing area is imperative. These cases are best treated by immediate surgery and repeated transfusions.

Dr. St. John believes that conservative treatment is important, however, and that properly selected cases should be treated medically in the surgical wards under supervision of the surgeon. In simple duodenal ulcer, he considers gastro-enterostomy the operation of election. Where there is erosion and severe bleeding, removal of the ulcer-bearing area does most to prevent recurrence and secure a permanent cure. In selected cases, the Billroth II. type of operation has been quite successful.

Dr. St. John's paper was illustrated by a series of very interesting and instructive lantern slides of gross and microscopic sections.

The following resolution upon the death of Dr. J. Edward Duffy were unanimously adopted.

Whereas, The spirit of Sacrifice and Service in the Medical Profession emanates from that first Great Physician, Hippocrates, and found altruistic expression in our colleague, Dr. J. Edward Duffy—

And Whereas, His life was one of devotion not only to his family but also to the ideals and precepts of his profession in his daily ministrations to suffering humanity—

And Whereas, He has recently been taken from our midst and called to that larger group which has accomplished perfection in the principles to which we are pledged—

So, Be It Resolved, That the Bergen County Medical Society extends to his bereaved family this expression of our appreciation of his daily exemplification of our ideals and ethics—

And further, To assure his family of the respect and esteem which the members of this organization held for their beloved one; and that in this moment of sorrow we extend our profound sympathy—

And Further, Our consoling thought lies in knowing that he has gone to the Greatest of All Givers for his full reward—

And, Therefore, Be It Further Resolved. That a copy of these resolutions be sent to Dr. Duffy's family, and that as a mark of es-

teem and respect these resolutions be spread upon the minutes of this Society, and published in the Journal of the State Medical Society.

#### BERGEN COUNTY MEDICAL SOCIETY,

President, H. Trossbach,  
Secretary, C. N. Dezer, Jr.

A special meeting of the Bergen County Society was held Wednesday, May 20, at the Lederle Laboratories, Pearl River, New York, immediately preceding the joint meeting at that point with the Rockland County Society. Dr. Trossbach presided, with 40 members present. Dr. Marvel's letter asking for an expression of opinion by the Society in regard to deleting section 4, article 4 of the State Society By-Laws was discussed, and upon motion of Dr. Hallett the Society approved of the proposed change eliminating permanent delegates and instructed the permanent and annual delegates of Bergen County to that effect.

The question of group insurance on automobiles for all members of the County Society was discussed but no action taken.

The joint meeting of the societies then followed, Dr. A. Zingher discussing "Scarlet Fever, Its Prevention and Cure". Dr. Zingher described the work done with the hemolytic streptococcus in relation to scarlet fever and with particular reference to the discoveries of the Drs. Dick. He presented statistics showing the effectiveness of establishing immunity with the vaccine and explained that both the scarlet fever test and the method of immunizing are similar to those of diphtheria and the results obtained are also similar.

Supper was served, following the conclusion of the scientific program.

#### CAMDEN COUNTY.

Thomas B. Lee, M.D., Secretary.

The Camden County Medical Society held its regular meeting on the afternoon of May 12, at the City Dispensary. In addition to the large percentage of members present, there were a number of visitors from neighboring counties and several officers of the State Society. Dr. Reik, Editor of the Journal, addressed the society and, in answer to a question from Dr. Lippincott, explained the meaning of the "Doctor's Title" bill which had been before the last legislature and which will probably be presented again. The Editor also explained plans in mind for promotion of the project for Periodic Health Examinations and was invited to present this matter in full at the next meeting of the Camden City Society.

Dr. J. Bennett Morrison, Secretary of the State Society, spoke of the plans being developed by the Trustees and other officers for the benefit of the organization and urged a full representation at the coming annual meeting of the State Society. Resolutions were passed approving the changes recently made in the Journal and endorsing the work of the Welfare Committee.



**ESSEX COUNTY.**

Alfred Stahl, M.D., F.A.C.S., Reporter.

The Essex County Medical Society held its last meeting of the season on May 14, 1925, at the Academy of Medicine, Newark, New Jersey.

Dr. David L. Kraker, of Newark, was elected to represent the society on the Nominating Committee at the coming State Society meeting; Dr. E. W. Murray was elected alternate.

Drs. Paul H. Hosp, C. R. O'Crowley, H. Roy Van Ness and Richard D. Freeman were nominated as Permanent Delegates to the State Society. The following were elected Annual Delegates: Drs. M. S. Avidan, F. W. Becker, F. Carbone, Charles W. Crankshaw, L. L. Davidson, Elliott I. Dorn, B. E. Failing, Armin Fischer, Adolf Flachs, J. D. Fort, Ernest Gennell, B. H. Greenfield, Paul H. Hosp, Edgar A. Ill, J. S. Lincoln, Henry G. Smith, Earl Snively, Julius Sobin, H. A. Schacter, J. B. Stevens, H. W. Thayer, H. R. VanNess and Carl H. Wintsch.

Dr. Linsly R. Williams, Director of the New York Academy of Medicine and of the National Tuberculosis Association, addressed the society on "Progress in the Medical Profession". The doctor pointed out the desirability of the profession as a whole, placing before the public what it stands for and what it opposes. To do this a man of exceptional ability should be procured, who can plead the cause of the profession in season and out, and keep it constantly before the public. Adequate remuneration only will attract such a man. It is by this method that the advisability of periodic health examinations can be impressed upon the public. In other words, an intensive campaign will be required to sell this idea to the people at large.

If we are to expect the public to take up the idea of periodic health examinations, it will be necessary for the doctors to prepare themselves for the task, by special courses, discussion at medical meetings and in our medical journals.

Dr. C. Rutherford O'Crowley, president of the Essex County Society, gave a dinner at the Newark Athletic Club to the Council and others, in honor of Dr. Williams, prior to the meeting of the society.

**GLOUCESTER COUNTY.**

Henry B. Diverty, M.D., Reporter.

The Gloucester County Medical Society met at the Hallowell School of Adjustment, Margate Park, Atlantic City, May 21, by invitation of Dr. Madeleine Hallowell. The members present were: Drs. Ashcroft, Hunter, Wood, Fisler, Campbell, Downs, Hollinshed, Underwood, Ulmer, R. Carpenter and Diverty. Drs. Richardson and La Fever, of Camden County; Dr. Van Dusen, of Cumberland County; and Dr. Marvel, of Atlantic City, were present as guests, the list also including 19 ladies.

After a short business meeting, the session was given over to the hostess who demonstrated the development of the child from an abnormal toward a normal state, and gave exhibitions of the work of the children in reading, arithmetic and physical exercise. At the conclusion of this program, a sumptuous luncheon was served, and a special vote of

thanks was given Dr. Hallowell for entertaining the society.

**HUDSON COUNTY.**

Wm. Freile, M.D., F.A.C.S., Reporter.

The last stated meeting of the year was held on May 5, at the Auditorium, Jersey City Hospital, President E. J. Luippold, M.D., presiding. Dr. B. S. Pollak, of the Welfare Committee, reported the purchase of 104 automobile insignias, all sold, and moved that 50 more be procured. Dr. Yeaton mentioned that the A. M. A. had changed the type of caduceus. Dr. Pollak thought that inasmuch as the present insignia was now recognized by the police of Hudson County, it would be unwise to change.

Dr. C. B. Kelley stated that the gain in membership had been somewhat offset by delinquents.

Dr. S. R. Woodruff mentioned that there had been no attempt made to make any money from the "Bulletin", and that with the increased cost of material and mailing, it just about carried itself.

Dr. Henry Spence reported a conference with Bar Association members who had some ideas themselves about needless suits and waste of doctors' time on subpoena cases; and, he counselled that nothing further be done until the committee from the Bar Association and County Medical Society had a conference.

The Nominating Committee, consisting of Drs. Woodruff, Spence, Pollak, Sweeney and Ginsberg, reported through its chairman, Dr. S. R. Woodruff, as follows:

President: Joseph F. Londrigan. Vice-President: William Freile. Secretary: Harry J. Perlberg. Treasurer: H. H. Brinkerhoff. Reporter: M. I. Marshak. Permanent Delegate: E. J. Luippold.

Annual Delegates: J. F. Londrigan, G. Ginsberg, A. A. Mutter, F. Pearlstein, H. Klaus, M. T. Callery, A. E. Jaffin, D. Miner, Howard S. Forman, G. H. Mueller, C. J. Larkey, E. Thum, W. A. Pinkerton.

Censors: E. T. Steadman, chairman; F. J. Quigley, W. L. Williamson.

Trustees: S. R. Woodruff, chairman; C. V. Niemeyer, G. K. Dickinson, B. S. Pollak, John Nevins.

Scientific Work: E. J. Luippold, chairman. A. E. Jaffin, J. M. Rector.

Welfare: B. S. Pollak, chairman; H. Klaus, A. V. Piskorski, S. A. Cosgrove, C. J. Larkey, A. C. Forman, W. J. Mathews, Louis Lange, H. F. Tidwell.

Membership: C. B. Kelley, chairman; H. V. Broesser, B. Kooperman, William Eckert, W. N. Barbarito, J. M. Kolb, R. L. Ballinger, J. J. O'Connor, P. Marks, M. Frank, M. J. Weiss, A. Justin, J. Koppel, George F. Sullivan, W. Brooke, D. B. Street, W. G. Doran, Louis Pyle, William Pyle, C. A. Opdyke, T. F. Coughlin.

Audit: W. A. Pinkerton, chairman; J. P. Stout, J. J. Pagliughi.

Publication: S. A. Cosgrove, chairman; W. T. Callery, S. R. Woodruff, S. Sellinger, M. Marshak, N. Shapiro, Alvin E. Kuhlmann, J. M. Cassidy, G. Ginsberg, H. T. Von Deesten, J. N. Connell, Joseph Schapiro.

Publicity: A. E. Jaffin, chairman; S. R. Woodruff, F. J. Quigley.



These recommendations were confirmed by election.

Dr. Joseph F. Londrigan, the new president, expressed the hope that he might be able to keep up the good work. He stressed the great need for some action against unnecessary law suits, when men like Drs. Dickinson and Bowyer can be annoyed, and felt that if we were more loyal to our profession and ourselves, there would be little of such litigation.

Dr. S. A. Cosgrove also spoke in an emphatic strain on this topic.

Two applications for membership were received. Dr. John H. Jentz, 48 Lincoln Street, was reported on by the censors, and elected.

Dr. F. J. Quigley gave a resumé of the work of the Welfare Committee at Trenton, with the results. He believed that legislation is largely moulded by public opinion, and referred to the activities of the chiros in the last six months, and to the fact that when anything inimical to this or the other cults appears in the press, it is usually answered the next day and is generally couched in language to indicate that these people are being persecuted. Some of the representations made in the newspapers recently by the Manufacturers' Association also carried a false impression; as a matter of fact the increased figures really showed how much these companies had been getting away with. Dr. Quigley believed there should be a coördinate function of the counties with the State Society in this matter of getting the truth before the public.

The President then introduced Dr. Henry O. Reik, Editor of the State Journal, who spoke of his endeavoring to make this publication more helpful and attractive. In the May issue 16 out of 21 counties were reported. He congratulated Dr. Freile on being promoted; but regretted his loss, as he has furnished excellent reports, many of his synopses comparing favorably with the original articles, and this was a phase that the speaker intended to further develop in the Journal. He asked the members to express themselves to the Editor, with suggestions, etc., and to send him any clipping which they thought should have his attention. He mentioned that articles are now being prepared on certain topics of special interest, such as smallpox and other infectious diseases, and, regarding periodic health examinations, he believed the plan could be furthered by addresses to groups of medical men and to lay organizations under the auspices of the County Societies.

Dr. Morrison, State Secretary, said he always felt at home in Hudson, perhaps because it was democratic, perhaps because it was near Newark, or probably on account of the large number of friends he counted among the members. He recalled in detail some of the accomplishments of the Welfare Committee in the last few years, and the amount of money it cost. He knew that Drs. Larkey, Quigley and Londrigan, had a good conception of the inroads this work had made on their time and practice. The scope of the society work was about 4 times what it was a few years ago.

He referred to the faithful and memorable work accomplished by Dr. English, as editor of the State Journal, who for twenty years gave up his life to the development of organized medicine. He told of the great difficulty

he had experienced in securing an editor for the publication, it requiring a man of many parts to fill the bill, and he felt that the Society was fortunate in having secured Dr. Reik.

He told of the contemplated publicity program and mentioned that the Society was now keenly interested in the Periodic Health Examination propaganda, and had also in mind a postgraduate study course, about which he gave some of the details. The main idea in the Doctors' Bill was to protect the foreign element, and the ignorant, so that a patient might know from the sign what type of individual he was consulting.

He stated that a man got out of his State Society just what he put in it, and emphasized the necessity for prompt payment of dues (which by the way will be larger the coming year) as every delinquent required the writing of from 3 to 7 letters from his office.

Dr. Jaffin then introduced Mr. Mariette of the Tuberculosis Clinic of Hudson County, who showed a motion picture entitled "Working For Dear Life". The text of this film was essentially that of preventive medicine as exemplified by periodic health examinations. Dr. Jaffin called attention to the fact that he had enclosed with each copy of the "Bulletin" 2 forms, one of which should be filled out by the applicant, and he earnestly urged every member to return the blank so that appointments could be made for the examinations.

#### MERCER COUNTY.

A. D. Hutchinson, M. D., Reporter.

The Mercer County Society met in the rooms of the Carteret Club, May 13, Dr. Leo Haggerty presiding.

Dr. Henry O. Reik, Editor of the State Journal, was introduced and gave a most interesting discourse on the work of the Society and outlined particularly his plans for educational work with reference to the subject of Periodic Health Examinations by the family physician. Dr. Reik offered his services to the County Society not only in relation to this matter but for any educational work with the public in regard to preventive medicine.

Dr. George E. Pfahler, Chairman of the Committee on Cancer Control of Philadelphia, next gave an interesting address illustrated with lantern slides.

In 1922 it is estimated that 94,874 deaths in the continental part of the United States were due to cancer. Of all deaths over the age of 20 years, 1 in every 10 was due to cancer; hence, 1 out of every 10 people over 20 years of age now living in the United States will die of cancer unless the physicians and the public make definite progress in the fight against cancer. In Philadelphia, during the year 1923, according to figures obtained from the Department of Health, there were 2217 deaths from cancer, over the age of 20, or 10.8% of the total of 20,439 from all causes, or more than 1 in 10 over 20 years of age. There were 2065 deaths from cancer, or 12.5% of the 16,471 deaths from all causes over the age of 40, or 1 in 8. During 1924 there were 2196 deaths from cancer, which is 11.2% of the 19,563 deaths from all causes over the age of 20. The ratio of cancer deaths, therefore, to other deaths during 1924

has increased 4% over that of 1923. Cancer, in Philadelphia, therefore, has caused the death of more than 1 in 10 over the age of 20 and 1 in 8 over the age of 40 during the past 2 years. In 1923 there were 152 deaths from cancer between 20 and 40 years of age, while in 1924 there were 191 deaths between these ages, an increase of over 25% in the young. The fight against cancer depends upon the coöperation between the public and the physicians. The laity must do their part, but it is clearly our duty to lead.

In 1924, in Philadelphia, there were 1044 deaths from cancer of the gastro-intestinal tract and its associated organs (the stomach, liver, intestines and peritoneum), or 47% of the total of 2227 deaths from cancer of all regions of the body, at all ages.

The exact cause and the ideal cure of cancer have not yet been determined, but if all the medical knowledge, now available, is utilized, we believe the number of deaths from this cause can be greatly reduced. The time to treat cancer is in its earliest stages, while it is still a local disease and before distant metastasis has occurred. The public must be taught to apply to physicians for diagnosis and treatment of precancerous conditions, and of cancer in its earliest stages. The physician, moreover, must examine each patient thoroughly, and must recognize the disease in its primary forms and treat it or have it treated thoroughly, skillfully and promptly, or the public will lose faith in the profession.

The following brief suggestions for diagnosis and treatment, which have been formulated by the Committee on Cancer Control, in collaboration with many of the leading teachers of medicine in Philadelphia, may, therefore, be helpful as reminders to the busy practitioner. Each of these points has been emphasized in our minds, because its neglect has lead to delay in the early diagnosis and the proper treatment of cancer.

(1) Take a careful history of all patients and review the records you already have.

(2) Examine all patients thoroughly. Do not hesitate to have the clothes removed.

(3) Find the cause of loss of weight, especially over the age of 20. Loss of weight does not occur early in cancer.

(4) Be suspicious of any sore on the skin or mucous membrane that does not heal within 2 weeks. Be especially suspicious of any sore on the lip.

(5) Be suspicious of any localized induration if not definitely accounted for by acute infection.

(6) Be suspicious of any mole or wart that is changing its character or size. If a mole is brown or black, and especially if it has existed for years, it should be thoroughly removed when discovered. If there are associated palpable lymph nodes, they are very likely to be metastatic carcinoma.

(7) Always examine with the fingers as well as with the eye. This applies, also, especially to the mouth, throat, vagina and rectum.

(8) A new growth anywhere in the body should be regarded with suspicion until proved benign.

(9) Be suspicious of enlarged glands and find the cause of such enlargement. It always means some serious condition.

(10) Absence of pain in a tumor or a sore does not mean absence of cancer. Almost all cancers are painless at the beginning.

(11) Cancer frequently develops in syphilitic patients. A positive Wassermann test, therefore, does not prove that a lesion is not cancer. Cancer and tuberculosis may also exist in the same patient.

(12) A discharge from the nipple is not always cancer, but must be seriously investigated.

(13) The cause of any vaginal discharge must be determined and not explained away without a thorough local examination.

(14) Irregular bleeding from the vagina, no matter how slight, should raise the question of cancer, and should lead to a careful and thorough study. If neither clearly innocent, nor probably malignant the patient should be kept under close observation. A consultation will be helpful. Doubtless cases are often better treated as if malignant.

(15) Bleeding from the uterus or vagina, occurring after the menopause has been established, is very likely to be due to cancer.

(16) Bloody urine is suggestive of cancer and its cause must be determined. An x-ray study and a cystoscopic examination are usually necessary.

(17) Blood stained stools or bloody mucus, painful, frequent or difficult defecation should lead to an immediate, careful investigation of the rectum and bowel, under an anesthetic in most case, and by rectal speculum as well as finger. The bleeding should not be erroneously ascribed to hemorrhoids.

(18) Investigate the cause of any prolonged indigestion, especially after the age of 40.

(19) Palpate the abdomen thoroughly in every obscure case.

(20) Persistent jaundice must be investigated.

(21) Vomiting of blood is always a danger signal. Its cause must be determined.

(22) A test for occult blood in the stools is often helpful, but the possibility of blood in the food or blood from the nose, throat, lungs, hemorrhoids, anal fissure, etc., must be eliminated.

(23) A thorough x-ray study of the gastro-intestinal cases is very helpful.

(24) The cause of difficulty in swallowing must always be investigated. This is best done by an x-ray examination or an esophag-  
oscopy.

(25) The expectoration of blood without fever may mean cancer of the lung. The presence of fever does not eliminate cancer. Pain in the upper part of the chest, neck or shoulder may be due to cancer. An x-ray study is advisable.

(26) Be suspicious of hoarseness not definitely due to cold, or if continued more than 2 weeks. Its cause must be determined.

#### MONMOUTH COUNTY.

D. F. Featherston, M.D., Reporter.

By far the most successful meeting of the Monmouth County Medical Society held this year took place, May 20, at the home of Dr. W. J. Donovan at Brielle. There were about 40 members present, who discussed at length the problem of the evening, which was "Con-



traception". Dr. James F. Cooper, of New York, who is connected with the American Birth Control League of 104 Fifth Avenue, was the speaker of the evening and presented the question of contraception from the scientific point of view, wherein it affects the doctor.

Dr. Cooper took up the subject of the need of the practice and went into detail as to the different methods which have been used by birth control advocates throughout the world. He explained the work of the American Birth Control League at their clinic in New York, which is the first association to take up the work and open a clinic in this country, and the success that it has had in its first series of 16,000 cases.

The discussion was opened by Dr. Edward J. Ill, of Newark, who just celebrated the completion of 50 years in the active practice of medicine. Dr. Ill is a former president of the American Gynecological and Obstetrical Society and one of the most prominent members of this specialty in the country. Following Dr. Ill the subject was taken up from a theological point of view by Rev. Felician of the Roman Catholic Church in Point Pleasant and by Rev. Fr. Schwacke, pastor of the Episcopal Church at Freehold.

Present at the meeting was, Dr. Henry O. Reik, of Atlantic City, Colonel M. R. C., U. S. army and editor of the Journal of the Medical Society of New Jersey. Dr. Reik was interested in obtaining the point of view of the county society on this subject as well as on the subject of the sterilization of the feeble-minded and criminals in the state institutions so that he might have an accurate idea as to the stand to take when these subjects are presented to the legislature in bill form, as it is expected that they will be at the next session.

Dr. Reik urged the members to be present at the State Society meeting in June at Atlantic City and spoke of the rapid advance the Journal of the Society had made in the past year. In the last number he said that there were reports from 16 out of the 21 county societies in the State of New Jersey.

Dr. W. G. Herrman, of Asbury Park, presided over the gathering and revealed plans for the June meeting, which is to be a dinner and dance for the members and families, to be held at the Shrewsbury Country Club.

#### MORRIS COUNTY.

Marcus A. Curry, M.D., Reporter.

The quarterly meeting of the Morris County Medical Society was held on Tuesday, May 9, at the Shonghum Sanatorium (Morris County Tuberculosis Hospital) by invitation of the Board of Managers and Miss Katherine E. Dandley, Superintendent.

The meeting was called to order at 11:30 a. m. by President McMurtrie; there were present about 35 members and guests, among the latter being Drs. Gambill, Holdcroft, McMurry, Lein and Henningsen, of the staff of the State Hospital at Greystone Park. Two new members were admitted: Dr. Robert Schulman, of Mendham, by transfer from Kings County (New York) Society, and Dr. Elvin McElroy, of Rockaway, unanimously elected. Treasurer Reed's report showed the society to be in flourishing financial condition.

A communication was read, from Dr. Philip Marvel, on the subject of a radical change in the constitution of the State Society; and in support of these proposed changes, indicating how permanent delegates by reason of numerical strength could be obstructive of instruction of annual delegates; and how the combined delegates of a certain few counties could control the affairs of the society; and stating that the State Society is a member of the A. M. A. only more or less by tolerance because of constitutional variance.

The foregoing proposal was discussed and culminated in the adoption of a decision to take a postal card vote of members of the county society to get their judgment on the proposal to change Section 4, Article 4, doing away with permanent delegates.

A communication was read relative to changes in the by-laws of the State Society, prepared by Dr. Johnson; whereupon the delegates of the county society were duly instructed to consult with Councilor Runyon of this district and be guided by his advise in the matter.

A report of the State Welfare Committee was read and duly ordered to be received and placed on file.

The Nominating Committee reported its roster of officials recommended for next year; to be voted on at the September annual meeting. In the absence of Chairman Mills the report was made by Dr. Flagge, who, in good grace and touching intonation, made a very pleasing digression to present to Secretary Kice an ornate and useful gold-mounted fountain pen. Dr. Flagge said of Secretary Kice: "For the past quarter century Dr. Kice has served us well and faithfully. It must be a great pleasure to him to know that during those one score and five years his minutes never have been criticised and always have been approved as read; and that in all that time he has never missed but two meetings. Now we should like to show him that during the past twenty-five years, if not before, he has endeared himself to us and that we appreciate his good work; and as a little memento we, the members of the Morris County Society, should like to present Dr. Kice with this little gift. Its intrinsic value is very little; but what it represents will last many, many years and will last through the heat of summer and the cold of winter; and our affection will endure for years to come".

Responding, Dr. Kice said: "Gentlemen, this comes like a bolt of lightning from the clear sky. Dr. Flagge has been about a month, I suppose, making up his speech. As the gift is a pen, I suppose it must be based on the thought that 'the pen is mightier than the sword'. Anyway it is an honor to have been your Secretary and to have served the society for 25 years; it is certainly a compliment to the one who serves as I think service is one of the things sacred; so I have tried to do my best. While this is a surprise and I am not prepared with any speech, nevertheless, I certainly appreciate the gift and what it symbolizes; and I thank you".

Superintendent Curry, of the State Hospital at Greystone Park, in behalf of the Board of Managers and himself, extended an invitation to the society to hold the September annual



meeting at the State Hospital at Greystone Park. The invitation was unanimously accepted with expressions of appreciation.

Routine business being disposed of adjournment was taken.

With the officials of the sanatorium, county officials and other guests of the day, the members of the society made a complete inspection of the sanatorium and found the entire place not only proof against criticism but inviting the highest terms of approbation, making quite excusable the great pride that the officials and the citizens of Morris County take in the institution and its management. President Thomas A. Leonard, of the Board of Managers, and Superintendent Miss Katherine E. Dandley were alert almost to the approach of ubiquity in affording the fullest opportunity for inspection and insight into the operation of the sanatorium and exercised a highly exemplary type of ciceronage.

The tour of inspection being completed the members of the society and other guests of the day, numerically more than 100, were comfortably seated about the spacious lawn where they were served a la buffet with a luncheon, to partake of which was to be delighted. At 2:45 p. m. everyone assembled in the solarium and points of vantage of the nurses' home for the open meeting. President McMurtrie called the meeting to order, saying that each year the Board of Managers and Superintendent Miss Dandley invite the County Medical Society to hold its meeting at the sanatorium and the society always has been glad to accept the invitation; that the county society has always thought it a good idea to have this a public meeting so as to let the people in general know what we have done for tuberculosis and to have someone here to tell what has been done in its treatment. Dr. McMurtrie then turned over the further direction of ceremonies to President Leonard of the Board of Managers, who said: Ladies and gentlemen, members of the county medical society, visiting nurses and all of you who are present because of your interest in the work of this sanatorium, it is a genuine pleasure to see you here today. I am very glad to be here and you all look good to me. Morris County is a pretty good place; as my friend Dr. McAlpin has said "No one need be afraid to say he is from Morris County". We have had a very successful year at the sanatorium; at least very much better than we expected and growing all the time. In 1924 we had an average of 33 patients as against 25 in 1923; in 1925 we have had an average of 34 patients daily. Our 38 beds have been filled at different times during last year, so we thought it advisable to add 6 beds; now having 44 beds which is the most we have had and compares favorably with 24 beds 6 or 7 years ago. We feel that the hospital has been making bigger strides during the past few years than formerly; and we attribute this to the hearty coöperation that the doctors and the other societies have given. We feel that it is due to the fact that they are becoming more familiar with our aims and work at the hospital and, consequently, are helping us.

President Leonard said further that the daily cost per capita has dropped from \$3.88 in 1923 to \$3.31 in 1924; the actual cost to the county from \$2.88 in 1923 to \$2.31 in 1924;

and the average to date this year is about the 1924 average; that the running expenses of the hospital in 1924 were about \$38,000., approximately, and this year they would run about \$40,000. provided the census doesn't run more than 2 patients higher than last year. In the permanent work of the hospital the main thing this year will be some minor repairs in the nurses' home and in the hospital.

President Leonard then introduced Mr. Fletcher Fritts, chairman of the tuberculosis committee of the Board of Freeholders, who spoke of the coöperation between the freeholders and the sanatorium management, paying high tribute to those who had the forethought to establish the sanatorium, to its Board of Managers and to Superintendent Miss Dandley for her indefatigable work and intense personal interest.

Other speakers introduced were Director Waters of the Board of Chosen Freeholders who endorsed all that Chairman Fritts had said and stressed the point of expenses being reduced which is something unusual in these times, and pointing out that it would not be possible except by very efficient management. Mrs. Dr. Abell, President of the County Anti-Tuberculosis Society, gave a very enlightening review of the work of the society, which lent insight into its workings, showing what had been accomplished and what is planned to be accomplished; detailing the preventive, educational and other work done and how the society carries on its work in connection with Shonghum Sanatorium, Glen Gardner and the Preventorium for Children at Farmingdale. Dr. Abell's report was brightly illuminated with details and statistics which enabled a clear visualization of the work over which she presides as President of the Society.

Mr. Leonard then introduced the speaker of the day, Dr. Allan K. Krause, of Johns Hopkins University and Editor of The American Review of Tuberculosis. Dr. Krause, as was fully anticipated, gave an address on the subject of Tuberculosis that was captivating alike to physicians and laymen and well designed to be absorbed by a mixed audience. He delved deeply into the bacteriology of tuberculosis in an intensely interesting way; showing how and why this disease had been reduced from the first cause of death to its present rank of third; the control that exists over the disease, how it is exercised, and the most favorable influence on other diseases has been the campaign against tuberculosis. Among the enlightening statistics cited by Dr. Krause, was the fact that last year New York City, with a population of about 6,000,000, had only 5000 deaths from tuberculosis; whereas if the death rate of 1910 had prevailed the deaths would have totaled about 14,000; which illustration should permit the imagination to soar to some realization of the aggregate accomplishment of the nationwide campaign against the disease. Dr. Krause's detailed description of laboratory work with tuberculosis bacilli was of peculiar interest and left no doubt of the hardness of the germ and its ability to survive against destructive treatment to the point of outdistancing easily any other germ for endurance, because of its resistant wax or fat which prevents it from being destroyed by treatment that easily would kill other germs. Dr. Krause's address

was titled "Evidences and Effects of Resistance in Tuberculosis" and he covered his subject in a most masterful manner with much illumination to his audience. He characterized the treatment and control of the disease as the greatest medical, social and economic miracle in the history of the world, and stated that without the medical and laboratory work the efforts of the anti-tuberculosis associations and other efforts would have accomplished little.

At the close of Dr. Krause's address, President Leonard of the sanatorium thanked him for his most interesting talk and expressed the hope that the County Medical Society would favor the sanatorium again about this time next year.

The day was one of pleasure and enlightenment to all present, the outstanding feature being easily Dr. Krause's address.

### PASSAIC COUNTY.

Louis G. Shapiro, M.D., Secretary.

The May meeting of the Passaic County Medical Society was held on Thursday evening, May 14, at the Health Centre Building, Paterson. An unusually large attendance, 67 members, helped to make the gathering a very enthusiastic one. Dr. Thos. A. Dingman presided. The meeting was called to order at 9:15.

Dr. Hans Wassing demonstrated two microphotographs of slides from the chondroma of the humerus, a case which had been presented at the April meeting by Dr. Spickers. (Dr. Spicker's paper will soon appear in the Journal.)

Dr. Frank S. Mathews gave a most practical talk on "The Diagnosis and Treatment of Gall-Bladder Disease". A lengthy discussion followed in which a large number of the members participated.

The evening's business being finished, the meeting adjourned and the members enjoyed a collation.

### SALEM COUNTY.

William H. James, M.D., Reporter.

The annual social session of the Salem County Medical Society was held in the afternoon of May 21 at the Salem Country Club, situated on the bank of the Delaware River about 4 miles below Salem. There was a very good attendance, most of the members being accompanied by their wives, and all enjoyed the special planked shad dinner for which this district is famous. Guests from neighboring countries included Drs. Glendon, Moore and Miller from Cumberland County.

The guest of honor was Dr. Henry O. Reik, Editor of the State Medical Journal, who upon being introduced by Dr. George A. Davies, of Elmer, gave a very interesting talk concerning the development of the Journal and the coöperation of the county societies in promoting the plans of the state organization. Dr. Reik explained, at some length, the work of the Welfare Committee, and the plans for introducing and promoting educational work, with special reference to Periodic Health Examinations.

### WARREN COUNTY.

F. A. Shimer, M.D., Reporter.

The semi-annual meeting of the Warren County Medical Society was held at the Washington Club, Washington, N. J., at 11 a. m., Tuesday, May 19, 1925. The meeting was called to order by Dr. C. H. Lyon, President, with the following members present: Drs. Allen, Bossard, L. H. Bloom, G. H. Bloom, Burd, Cummins, Curtis, Dedrick, Hacketter, Kline, La Riew, Lyon, McKinstery, Osmun, Shimer, Smith, and Wolf. The minutes of the last meeting were read and approved.

Dr. Dedrick reported on the work of the Welfare Committee of the State Society and a communication from Dr. Philip Marvel, of Atlantic City, was presented asking the Society to endorse his proposal that the Constitution of the New Jersey Medical Society be so changed as to eliminate Permanent Delegates and to provide for an equitable representation of the County Societies by election of annual delegates. The Society voted to endorse Dr. Marvel's proposition and to also recommend that the Board of Trustees of the State Society should be composed of one member from each County Society and the immediate past president of the State Society.

A motion was offered and adopted that the President of the County Society appoint a special committee to assist in adjusting and enforcing the sanitary code of the State Board of Health.

Drs. C. H. Cline, of Hacketton; F. W. Haggerty, of Vienna, and Walter Storm, of Hope, were all elected to membership.

Dr. B. M. Hance, of Easton, Pa., gave an address on "Some Interesting Cases of Kidney Infection".

Dr. Wolf, of Phillipsburg, presented a paper on "A Case of Carcinoma of the Head of the Pancreas in a Patient 17 Years Old".

Dr. Smith, reported for the special committee of arrangements that plans are advancing for the Centennial Celebration of the Society and that it would be held on November 10, 1925, at Belvidere, N. J. The committee recommended an assessment of \$5.00 per member to defray the expenses of this celebration, and their report with recommendation was adopted.

Dr. Williams, who has been ill for some time, was elected an honorary member of the Society. It was voted to send flowers, together with an expression of sympathy, to Dr. Zuck, who is ill in an Easton Hospital.

Upon motion, duly seconded, it was decided to have a Stag Picnic at Stuyvesant Lake on July 15, 1925.

Dr. L. C. Osmun was elected to represent the County Society on the Nominating Committee of the State Society at its coming convention.

**Good Idea.**—A little girl seeing a one-armed man on the street said to her mother: "Mamma, will his arm ever grow again?"

"No, darling," replied her mother.

The child thought for a moment and then said: "Well, mamma, if the Lord made us, I think He ought to keep us in repair, don't you?"—Boston Transcript.



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## THE GENERAL PRACTITIONER AND THE FRACTURE SITUATION.

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It is a matter of common observation that surgeons, in and out of hospitals, do not control the initial surgical care of patients nearly as much as do general practitioners. In so far as serious accidents are concerned, especially in cities where ambulances are maintained, this control of surgical cases is less manifest; but nevertheless, the injured patient, even in an emergency, usually demands his own doctor and to a very large extent relies on the latter's advice. We hear on every side that the "family doctor" is no longer a factor in the community and that the specialist has replaced him. My own observation is that this is not true to the extent claimed, at least in so far as caring for the injured is concerned. On reflection, we can readily understand why an injured patient and his family seek the opinion and counsel of their own doctor when an accident suddenly makes it necessary to obtain hospital treatment or the services of a surgeon hitherto unknown to the patient or his family. There are very few surgical emergencies aside from trauma in which the patient's own doctor is not the first choice; but in an accident, the patient and his family often have no selective choice, and indeed the patient may be unconscious or too badly hurt to express any preference.

The accident problem also faces the practitioner in another and more direct way, in that highway accidents from automobiles are now so common that every general practitioner is giving at least some attention to the treatment of the injured. It is therefore of supreme importance to the patient that every medical adviser shall be well and properly informed as to the latest and safest methods of dealing with injuries.

Every physician should know the surgical significance of sudden pain, local tenderness, and rigidity in the right lower quadrant of the



abdomen. That set of symptoms long ago, through abundant experience, made you advise the patient to obtain the services of a surgeon, and your recommendations in this matter are now usually followed. Similar knowledge as to the best treatment for even common injuries is not yet, however, so well diffused, and even well-informed general surgeons, until recently at least, have given little if any proper attention to this very important branch of general surgery. Hospital surgeons were too intent upon other phases of surgery, and to use their own words, "did not bother with accident cases". Hence the patient brought to the hospital with a ruptured appendix or a strangulated hernia would be reasonably sure of getting the attention of one of the best surgeons on the hospital staff, perhaps even the best man in that section of the State. But if the same person had been brought to the same hospital with a compound comminuted fracture of the leg, the "junior" on the house staff would administer the initial and most important part of the treatment. Perhaps, some time next day, the visiting surgeon would glance at this "broken leg case" and interest himself enough to order an x-ray examination, and perhaps assign the case to one of the junior attending surgeons or to the house surgeon. Next day, the third after the injury, the x-ray plate would be examined and then, for the first time, would there be any adequate realization of the clinical fact that the tibia and fibula were much comminuted and badly displaced. This sort of practice still prevails in some hospitals in some places, but there are 3 factors at work which are rapidly eliminating such outrageous procedures.

The first is that large numbers of our profession had sufficient experience with the war wounded to realize the fallacy that any sort of treatment by any sort of doctor was fairly good treatment for any sort of injury. The war taught, as had nothing hitherto in our generation, that the maximum of care and attention meant the minimum of disability. It also showed that Surgeon General Ireland was right when he said that the Medical Reserve Corps was full of surgeons who could do a fine gastro-enterostomy but had too few who knew how to give an equal grade of care to a gunshot wound comminuting a femur.

The second factor that awakened the profession to the need for better care of the injured was the enactment of Compensation Laws, now in force in 42 States. This meant that many industrial accidents would be subject to review, that record would be kept, that responsibility might be placed for poor treatment. The corollary of this is that malpractice suits might be instituted and the careless or heedless doctor mulcted in damages.

The third factor, and I think the most important, is that the automobile has become the great injury-producing factor and no population, however remote, is free from the possibility of serious injury. The doctor himself, his family and his friends are not immune from what is really an epidemic of trauma, and in your community, in mine, and prac-

tically throughout our whole country the profession is being daily brought into contact with those injured by automobiles. In the coming era of airships and aëroplanes this injury problem will loom even larger. There is then very real need for paying stricter attention to the care of the injured, and in no branch of traumatic surgery is there greater need for care than in the treatment of fractures.

Many doctors will have nothing to do with a fracture case, because it is more than any other form of surgery a malpractice liability. Others dislike this kind of surgery because the after-care requires so much attention. Still others dislike it because operations, plating and the like, are going out of fashion. However, patients still go to the doctor or send for him when a bone is broken, and the doctor should be just as competent to care for that kind of case as for any other.

There are some very practical clinical considerations that simplify this fracture situation for the general practitioner, and to some of these I would advert. What is a fracture? A helpful definition is to call it a wound of bone. In reality, a bone is nothing more nor less than hardened or shaped soft parts. We know that wounds can be regular and little separated, (incised wounds) or irregular and much separated (lacerated wounds). Bones broken act in precisely the same way and when the fragments are not overlapped they can be called Type II., and when they are overlapped they are called Type I.

Now, we suture wounds to coapt and bring about union; and we never think of getting union of soft parts unless we can bring the severed edges reasonably close together. We adopt the same treatment for fractures, only in the one case we use sutures, and in the other splints. Just here a big mistake is often made in the management of fractures. Many doctors are still of the opinion that splintage is the big factor in the treatment, and that an elaborate or much recommended splint, of itself, accomplishes the result. The fact is that no splint ever does anything except hold the parts in position, and unless the bone edges are in contact, the splint is actually more harmful than useful. What good would sutures be if wound edges overlapped or had no actual contact?

If, then, there are only 2 general types of fractures, Type I. the overlapping, and Type II the nonoverlapping, how are they to be managed? The gist of the matter is that we must convert the overlapped (Type I) into the nonoverlapped (Type II) and that is done by the most important element in all fracture treatment—namely, reduction. This matter of reduction, or setting, is the foundation of all fracture treatment in overlapping cases, but in the nonoverlapped all we need to do is to splint and maintain the carrying angle of the limb. In other words, Type I (overlapped) cases need reduction and splintage; Type II (nonoverlapped) cases need splintage only. Of course it goes without saying that either Type may be simple or compound, and that the

line of fracture-cleavage (linear, stellate, alphabetical) is relatively unimportant.

How is reduction obtained? Only in 2 ways; one by *manual* and the other by *mechanical* methods.

*Manual reduction* presupposes that by traction or manipulation we are able to at once realign the fragments; in other words, we convert an overlapped into a nonoverlapped fracture. To do this we must rely on our ability to stretch contracted muscles, tendons and ligaments, and this is often impossible unless muscular relaxation is first obtained by anesthesia. At this point it is pertinent to say that general anesthesia should be used more often than is customary, but that we should employ only the safer anesthetics, such as nitrous oxide, ether, or ethyl chloride; chloroform is an exceedingly dangerous inhalant in all forms of trauma.

*Mechanical reduction* presupposes that by traction and manipulation we are able to gradually align the fragments. This plan of reduction can be accomplished by various methods:

(1) A fracture table can be employed so that by the modern use of the thumb screw we drag the fragments into place. Now, if the table is used, we must remember that the muscles have a tendency to recontract even after a snug cast has been well applied. Hence we must be on guard and by repeated clinical and x-ray observations assure ourselves that displacement has not recurred even though a day or two after our original reduction the fragments appeared to be well aligned. This caution is most necessary in fractures of the shaft of the leg or thigh and we must have definite proof of no recurrence as late as the twentieth day following our original reduction. The use of the fracture table is becoming much more restricted in our service, and it is now used mainly for fractures of the neck of the femur.

(2) Glued or adhesive straps are applied to the entire length of the limb, and to these are attached suitable weights, the foot of the bed being raised so that the counter-pull of the patient's body may effect counter-traction. In all traction of this sort two points must be carried in mind; namely, the limb must be relaxed by bending the intervening joint, and the traction must always be made in the direction of the upper fragment. If the limb can be suspended while in traction, edema will be lessened and muscle-pull rendered more effective.

(3) *Skeletal traction* is used in that group in which some form of internal traction is needed and yet in which open operation is to be avoided. The three forms of skeletal traction are: (a) *transfixion or nail traction*, the Codivilla-Steinman method. In this a nail passes through the substance of the bone and to it is attached an ice-tongs-shaped spreader to which cords and weights are added. (b) *Tongs or Callipers traction*, the Ransohoff method. In this the prongs of the tongs enter the cortex of the bone, cords and weights are attached, and the limb is pulled upon in the direction of the upper fragment. (c) *Stirrup*



or band traction, the Finochietto method in which a narrow strip of metal (like a corset steel) is passed over the pronged top of a bone and weights are attached to the stirrup-shaped end of the apparatus. The top of the os calcis and the top of the olecranon are the 2 selective sites for this kind of traction.

(4) *Open operation* is reserved for fractures that cannot be otherwise reduced or those in which open correction brings about most accurate coaptation. In this group are selected fractures of the patella, of the olecranon, many of the radius and ulna, and some fractures of the tibia and os calcis. The kind of operation varies, as follows: (a) Open reduction in which the fragments are forced apart and are then self-locked by their own serrations. (b) Open reduction and deliberate serration of the fragments; this is termed by me bone notching or bone steeping. (c) Open reduction with suture of the fragments, using when possible only absorbable sutures of chromic gut, kangaroo gut or fascia lata. (d) Open reduction with the application of plates made of bone or metal. (e) Open reduction with the application of encircling metal bands, such as the Parham or the Smith device.

There is, then, a wide choice of operative methods and it is of interest to note that the more experienced the surgeon the less often will nonabsorbable material be employed. Traumatic surgery in this respect is passing through a phase long ago completed by general surgery, for you will recall that a decade or more ago, silver and aluminum-bronze wire was a suture material employed by many surgeons in operations now better performed by the use of absorbable sutures. Metallic material is of course necessary in some cases, but whenever employed it is now regarded as of temporary value only, and designedly is removed when union is complete. The humerus apparently is more tolerant than any other bone to the application of wire, and in 2 selected cases some months ago it was employed by us and is still in situ.

In passing, we would revert to the clinical fact that traumatized tissue is less resistant to infection than normal tissue and for that reason an excess of caution is needed in selecting cases to be operated upon. Plating and wiring of bones is still being done too often, with consequent infection leading to osteomyelitis, to nonunion, to disability, to loss of limbs, and in some cases to a mortality.

Compound fractures demand a high grade of initial care if infection is to be prevented, for the first treatment usually determines whether or not a compound can be converted into a simple fracture. These open fractures occur in 3 grades of severity as follows: (a) The minor grade with a punctured wound. (b) The moderate grade with a lacerated wound. (c) The severe grade with a crushing wound.

In the minor grade, sterilize by injecting tincture of iodine freely into the wound and then cover it with gauze soaked in "Iodin Solution" - that is, one dram of tincture of iodine to a pint of normal saline solu-

tion. If the puncture is large enough, insert a drain made of a rubber band or a few strands of silkworm gut.

In the moderate grade, use the same treatment in the average case, but do not immediately suture any compound fracture however strong the temptation. If the wound edges are bruised or frayed, or if the bone is much comminuted, give an anesthetic and sparingly trim away this devitalized tissue, including all detached bone fragments. Leave no frayed edges. Spend a long time in cleaning away any dirt and use a grease solvent like benzine, gasolene or kerosene when necessary. This trimming away of devitalized tissue is the war procedure of débridement and the rationale of it is that germs only propagate on dead or dying material. The ideal treatment of a compound fracture is to sterilize the wound by débridement (which is mechanical sterilization) or by iodine (which is chemical sterilization), then to insert but not tie the sutures, then to drain, then apply an iodine solution dressing, and then to splint. If all goes well up to the end of the third day, the drain is removed, and then the stitches already inserted can be tied and we thus have carried on the war technic of delayed or primo-secondary suture. This, by the way, is the best method of treating all accidental wounds, with or without bone involvement. In all accidental wounds my own experience leads me to less often resort to immediate suture and more often resort to placing but not tying sutures until after the third day. Primary union is not much delayed by this "safety first" method, but, on the contrary, disability and deformity are measurably prevented.

In the severe grade, the crushes, the run-over accidents, the cases with much laceration and contusion of soft parts and multiple fragments of bone—in these, débridement is the treatment of choice, suture, if at all possible, being delayed until all clinical and laboratory evidence of infection have disappeared. In these, and in some of the preceding group, the intermittent flooding of the wound with an antiseptic will aid in preventing the growth or spread of bacteria. This form of combined intermittent flooding and drainage by the introduction of tubes (the Carrel technic) is in reality intermittent mechanical cleansing or repeated sterilization. If the wound has been previously cleansed and débrided, the antiseptic employed is only a secondary feature and is not, contrary to the idea once maintained, the essential element in treatment. Antiseptics can only reach the surfaces exposed, and hence dead or dying tissues, if not previously removed by the knife and scissors, can harbor organisms out of reach of any antiseptic however strongly that antiseptic is or has been vaunted. Antiseptics are of some value, but a greater part of their usefulness depends upon their washing-away properties more than upon their capacity to kill the organisms. Therefore, in serious wounds we must not place too much reliance on any antiseptic, and, as you know, hundreds of them have been actually employed. That, of itself, means that we have no sovereign remedy, that

we must in the final analysis rob the organisms of their nourishment by removing damaged tissues without which organisms cannot propagate. In this connection, we should not forget the aid we can obtain from the laboratory in determining the exact nature of the contained organisms. Beware of any wound harboring streptococci and under no circumstances close a wound in which this type of germ is known to reside. We can with greater safety close wounds harboring staphylococci or colon bacilli or the pyocyaneus organisms; so, as a clinical axiom, we may say that we close all wounds unless they contain streptococci if, clinically, the wound surface is healthy in appearance, and if no streptococci are shown by culture.

Tetanus antitoxin should be given in all compound fractures in which street dirt, garden soil, or animal excreta may have been sources of contamination. Give this immunizing antiseptic serum in diluted doses over a period of half an hour and there will be little chance of anaphylactic reaction. Have at hand a hypodermic of adrenalin solution 1:10,000 and if anaphylactic signs appear, inject the adrenalin at once.

*Splintage* is an important phase of treatment, and every splint should first of all be safe and next it should be simple, and next it should be economic in point of cost and time saving. The ideal splint fits the patient and that patient only and for that reason two-piece moulded plaster of Paris splints should be more widely employed. However, it often happens that we must improvise a splint, and for that purpose nothing is better than a pillow pounded into a groove so that the limb lies therein. This is excellent for transport or for provisional splintage. Every hospital and every large industry should be provided with Thomas' splints, which are unsurpassed for transportation and equally valuable for many nonoverlapping fractures. If called to see a fracture of a leg, thigh, arm or forearm, it may not be possible or prudent then and there to apply any permanent or fixed form of splintage. In such a case, resort to traction on the limb by fastening to the ankle or wrist a towel or sheet, to the end of which is fastened a cord leading to a weight suspended from the raised end of the bed. Or, better still, fasten a strip of adhesive to either side of the entire length of the limb, and to this attach the cord and weight. If we do this within the first few hours, we will prevent muscular contraction and indeed may convert our overlapped into a nonoverlapped fracture. Place the limb thus fixed in traction on a grooved pillow and no other splintage will be necessary until we are ready to apply our permanent splint.

Joint fractures, such as those of the wrist, the elbow and the ankle, should also be reduced at once, because around joints we have not only muscular but also tendinous and ligamentous strong bands to overcome before bones will re-align. The first act in reducing any joint fracture is to increase the existing deformity far enough to get very free false motion. That disentangles the fragments and permits the second act,



namely, traction, to be more readily carried out. Moulded plaster of Paris two-piece splints are the best for these joint fractures because they are safest and they can be removed easily to permit inspection, massage and motion. Early mobilization is especially necessary in any joint injury; for example, in a Colles' fracture properly set, massage should begin the day after setting, passive motion can usually follow on the third day and active motion on the seventh. The rule as to early massage and motion is, that we permit same promptly unless joint reaction occurs in the form of added pain, swelling, heat and redness; in other words, if we develop a "hot box" in our joints by too vigorous stimulation, we temporarily desist.

When shall the splints be removed? A good rule to follow is to remove a portion of the splint (usually the anterior) when union has progressed to the stage of firm or "lead pipe" union, as evidenced by lack of free false motion and the presence of slight bending on pressure. The rest of the splint is removed when the stage of solid or "iron pipe" union is reached, as evidenced by inability to bend the bone at the fracture site.

When shall we permit usage? The "test for usage" followed by us is to permit the part to function after deliberate hard massage and pounding causes no reaction in terms of prolonged redness, pain and swelling. For example, in a case of fractured leg or thigh, we ask the patient to push firmly against the foot of the bed, or to stand on the good leg and pound the sole of the injured leg on the floor. In the upper extremity, we test the push and pull and grasping power, and thus gradually permit greater latitude. In lower extremity fractures, we make early use of walking callipers on removing splints so that a patient can be up and about far earlier than by passing through the stage of splint removal and then a long period on crutches.

These, then, are some of the factors in respect to the management of fractures and you should be in a position to carry out some of these measures yourself or have sufficient knowledge of them so that your patients may be so placed by you as to obtain their advantages. You occupy either the position of applying modern methods in fracture treatment yourself, or seeing to it that your patient obtains treatment under proper auspices. You occupy this position in respect to every other branch of surgery, and the time has arrived to accord traumatic surgery a place in general surgery, and not to regard it as minor surgery but actually more often a demanding form of major surgery. The home care of a major surgery case is not looked upon as good surgery except in unusual circumstances, and the same holds true for many of these fracture cases, and the time is coming when the profession will regard a fracture as a real emergency demanding as much care and attention as a case of appendicitis or a strangulated hernia.

## UREMIA.

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A century ago, Bright established renal disease on its present basis by demonstrating a relation between albuminuria and dropsy during life and pathologic changes in the kidneys after death.

Ever since his time, besides the dropsy, the albumin and the large heart, there have been recognized cerebral, gastro-intestinal, respiratory, and ocular symptoms as belonging to the disease. Even in Bright's time, these symptoms were thought to result from poisoning by waste matter which the kidneys had failed to eliminate. Urea, known to be the main waste product, was thought to be the poison, so the condition was called uremia. Unfortunately the matter has not proved quite so simple. It is true that nitrogen waste is often found in excess in the blood when uremic symptoms occur but, on the other hand, the symptoms may occur without any excess of nitrogen waste in the blood, and, vice versa, large retention occurs without causing typical uremic symptoms. So the term uremia has come to have 2 distinct meanings, first an increase of NPN in the blood and, second, any or all of the nervous, gastro-intestinal, respiratory and ocular symptoms that occur with renal disease.

Let me, therefore, divide my presentation of the subject into 2 parts: I. Disturbances of nitrogen elimination. II. Uremic symptoms and their causation.

### I.—Disturbance of Nitrogen Elimination.

Nitrogen waste is constantly found in the body and causes death if allowed to accumulate. The kidneys are the only organs that can adequately eliminate it, so that life depends on their unceasing activity. Stopping all protein food may reduce, but can give no pause to this work. Two separate renal functions are concerned in the excretion of urea: the power to concentrate urea in the urine, and the power to draw urea from the blood.

(1) The urea concentrating power. Normally a human can put between 35 and 40 gm. of urea into a liter of urine, i.e. can produce a 3.5% to 5% solution of this substance. This represents a concentration about a hundred times as great as that of urea in the blood. Ordinary urine hardly contains 2% because in health other factors cause urine volumes larger than necessary to carry off the urea. For this reason the specific gravity of ordinary specimens seldom reveals the full power of the kidneys to concentrate this substance. It is obvious, since there is a limit to the amount of urea the kidneys can put into a given volume of urine, that there will always be an obligatory minimal volume neces-

sary for the excretion of the urea produced in 24 hours. If the kidney can put 40 gm. in a liter, and the day's production is 20 gm., there will have to be 500 c.c. of urine in order to permit the kidneys to get out this amount of urea.

(2) The extraction of urea from the blood. The stimulus that makes the kidney take the urea out of the blood has been shown to be the presence of urea in the blood. That it is not due to a nerve mechanism is proved by the experiment of removing a kidney completely from the body and then reconnecting it with its vessels and ureter. After healing, if the other kidney is ablated the renal functions continue to be normally performed.

Not only is the urea in the blood the stimulus, but it has been shown that the output of urea bears a very constant relation to this stimulus so that the ratio between *urea in the blood and the urea put out in 24 hours*, has about the same value for all normal people. When the blood urea rises, the output rises in proportion; when the blood urea sinks so does the output. This quotient is not mathematically exact, for there are other modifying factors, but in the main the figure is astonishingly constant. This definite relation between stimulus and response has made it possible to study this particular renal function just as the response of muscle can be studied in the laboratory. Moreover, when this function is damaged in disease, its weakness can be revealed by the ratio long before it can be established by the blood urea figure alone. Slight elevations of blood urea, from 30 up to 50 mg. per 100 c.c., are notoriously difficult of interpretation because many incidents of diet and activity may cause such elevation in normals. It is just in these cases that the comparison with the output will show whether this urea function is damaged or not, and often bring a case under treatment while there is still time to protect the organ from strain and hopeless loss of capacity.

We owe these concepts of urea excretion to Ambard. His original formula has been improved by Van Slyke and I will digress for a moment to outline the test as now done, without entering into time consuming explanations. Before breakfast the patient drinks a pint of water; then empties the bladder completely, the exact time being noted. Blood is taken for urea determination. The body weight is taken if not already known. At the end of one hour exactly, all the urine in the bladder is collected and its volume and urea content determined. For the calculation the following are needed:

B = the urea in the blood in grams per liter.

D = the output of urea in grams calculated for 24 hours from the one hour period.

V = the volume of urine in liters calculated for 24 hours from the one hour period.



W=the body weight in kilos.

The formula is  $\frac{D}{B \sqrt{wxv}} = K$

and in normals  $K=7.53$  so the low normal limit is 4.5. Van Slyke told me he had not seen a lower value unless the kidneys were damaged.

#### INCREASE IN NPN IN THE BLOOD AND ITS SIGNIFICANCE.

A decided increase of NPN, 80 mg. and over, is met with clinically under five conditions:

(1) An excess of nitrogenous waste may be quickly dumped into the blood, either from a high protein diet or from cell destruction, as in pneumonia. If the kidneys are normal the blood out-put ratio will not alter and the excess will be rapidly disposed of.

(2) Failure to extract urea from the blood at the normal rate. The kidneys become less responsive than normally and, in order to eliminate the urea poured into the blood stream each day, the less competent kidney has to be driven or stimulated more than the normal one. The stimulus which drives the kidney to excrete urea is the concentration of urea in the blood; and this accordingly increases to compensate for the kidneys' failing response. This is not a true retention, for the urea poured into the blood each day is eliminated. It is simply a physiologic adaptation to make up for a weak excretory function, just as the heart rate may alter in the presence of a leaky or stenosed valve. It is obviously, however, the beginning of a vicious circle, for the weaker the kidney gets, the more nitrogen waste must be present in the blood to make it work, until the blood concentration of waste matter reaches and passes the toxic point. Then the patient suffers increasingly from the symptoms of nitrogen retention, which, in this form, almost inevitably progresses to a fatal termination. This is the form of retention that we meet most usually in chronic Bright's. The blood urea may continue unchanged for long periods but tends gradually to rise. This is the form in which treatment is most ineffectual for the reason, I believe, that it is impossible to arrest this urea function. Nitrogenous food can be stopped but the body continually produces a considerable amount of nitrogenous waste which the weakening kidney is driven harder and harder to deal with until it reaches exhaustion.

(3) Failure to concentrate urea in the urine. The normal kidney can put out urine containing 35 to 50 gm. per liter at the most. Ordinarily a man passes about 1 liter of urine a day which provides for an output of about 40 gm. of urea. Many people have 20 gm. to eliminate, so the margin of safety is not great. Kidneys that are only moderately damaged often lose the power to concentrate urea above 15 to 20 gm. per liter. If, in such patients, the urine volume is diminished for any length of time, as with persistent vomiting or after a surgical

operation, so that the daily volume falls below 500 c.c., (16 oz.) as very often happens, 5 to 10 gm. of urea is all that can excrete and the rest of what is poured into the blood can't get out. This is a true retention depending on a blocking of the outlet. In contrast to the second type, the blood figures rise rapidly and reach alarming proportions within a few days. These are the cases that cause postoperative deaths from retention, for the routine examinations give little information about concentrating power, and the danger is unsuspected until the postoperative retention is too high to be successfully dealt with. On the other hand, it is in these cases that treatment is most effective, treatment directed especially to increasing urine volume, or better yet, to avoiding a period of dangerous oliguria.

An instance of this kind of retention occurred in Roosevelt Hospital in the summer of 1922. A woman of 59 came in for persistent arthritic pains. Her NPN was 38, her blood pressure 150/100, her urine 1.010 containing a trace of albumin but no casts. She developed a severe abdominal pain, was diagnosed gall-stones, and operated on. The gall-bladder containing stones was removed and also the appendix. She seemed to be doing well after operation, but within a week, something was evidently wrong. On the eighth day after operation, her NPN was found to be 214 and on the twenty-first day it had risen to 316. On the twenty-sixth day she died uremic, without convulsions. The urinary volume averaged only 180 c.c. for the 3 days immediately following operation. Even after the condition was recognized, on the eighth day, and everything possible done to increase the urinary volume, the daily output only averaged 420 c.c., i.e., 14 oz. or less than a pint.

I have seen cases of this type with nearly 200 mg. of NPN saved by increasing the urine volume but a recent postoperative case of Dr. Sumner's service had over 400 mg. of NPN and well developed uremic symptoms and yet got well on the same plan.

Retention as we meet it clinically is not infrequently produced by a combination of the 2 modes last described. The rapidly pyramiding NPN in the terminal days of chronic Bright's is probably due to a true retention of the third type superadded to compensatory urea excess of the second type, when concentrating power, urine volume and excretory power all fail together.

Another result of failing concentrating power that leads on to nitrogen retention is the polyuria which has been so long recognized as a symptom of late Bright's disease; the specific gravity low and constant; the 24 hour volume high and constant. Koranyi gave it the name of "hyposthenuria" indicative of the lost concentrating power. Volhard & Jahr speak of it as a cardinal evidence of renal insufficiency, and so it is. It does not, however, occur in every case of fatal renal failure, not even, in my experience, in the majority. As has just been carefully pointed out, lethal nitrogen retention occurs; (1) by a weak-

ening renal response to the percentage of urea in the blood; and (2) by a loss of the ability to concentrate urea in the urine, which renders ordinary urine volume inadequate to carry off the daily collection of waste. The former and more frequent type causes a high NPN but does not demand increase of urine volume because the kidney can concentrate the waste products in the urine as usual, so that normal volumes carry off all the kidney can put out. In the latter type the kidney responds normally to the urea in the blood but can not adequately concentrate it in the urine so that large volumes of urine must be passed to get out the daily waste. The NPN is only a little elevated in the blood at first and for so long as the polyuria compensates for the lowered amount of waste per liter. As the concentrating power fails, the urine volume has to increase until it reaches the maximum the kidney can put out. Then the volume remains fixed and constant from hour to hour, as fluid intake cannot increase it for the kidney is already passing as much water as it can. Water privation cannot reduce it because the organism insists, by a means we don't understand, that the vital work of excretion continue, so the only results of water privation are a loss of weight, through excretion of body fluids to keep the urine volume up, and a compelling thirst, demanding their replacement. The specific gravity cannot rise because the kidney is already putting as much waste matter as it possibly can into each ounce of urine, nor can the gravity fall because the organism insists that this work, on which its life depends, shall not abate for a minute. Volhard well calls this condition "Zwangspolyurie", "polyuria under compulsion". During this condition of inadequate output in spite of maximum labor, the NPN in the blood rises to high figures. Toward the end the jaded kidney fails even in its water function and first normal and finally low volumes appear, usually only a short time before death. In these ways we see some cases of nitrogen retention with normally variable volumes and gravities and other patients who constantly pass large volumes of pale urine of fixed and low gravity.

During the past summer 3 nephritics died in the hospital of uremia within a week, with NPN's of 392, 434 and 520 respectively; they all had "urea frost" on the skin; none of them gave a history of definite polyuria and the specific gravities of their urines were 1.013 to 1.022, 1.015 to 1.020 and 1.012 to 1.020. In these cases the failure of the kidneys ability to extract urea from the blood was the cause of the fatal uremia rather than the loss of the ability to concentrate the urea in the urine.

(4) The fourth condition that produces high NPN is failure of the kidneys to secrete water, that is renal anuria. This results from acute inflammation of the kidneys, from bichlorid poisoning, from peritonitis; it is a sequel to severe operations, especially on the genito-urinary tract, and follows severe injuries and burns. As nitrogen waste and salts



are all excreted in solution and comparatively weak solution at that, it is obvious that anuria or profound oliguria must result in a retention of nitrogenous waste in the blood and in the body. This addition of the whole nitrogenous waste of each 24 hours to the body mass day after day is surprisingly well borne for nearly a week, then the toxic symptoms to be presently described as "true uremia" supervene and death results within 2 weeks.

(5) The fifth condition that causes high NPN is retention of urine. When urine is produced by the kidneys but retained in the body because of a mechanical block in the urinary passages, a high NPN in the blood is very apt to result, to reach toxic proportions and become a factor in death. The genesis of this nitrogen retention in the blood is, however, not so simple as it seems at first sight. In some of these cases quite a lot of urine leaks or is drawn off so that the daily volume passed may not be small enough to altogether account for the height of the NPN purely on the basis of inadequate volume. Moreover, in quite a few of these cases the concentrating power of the kidneys for urea is not seriously damaged. The normal walls of the urinary passages are impervious to nitrogenous crystalloids but it is probable that under the circumstances of prolonged distension with urine they lose this quality and allow some of the nitrogen waste to penetrate and be again resorbed by the blood. It is further possible that back pressure in the ureter and kidney pelvis may delay and alter the formation of urine by the kidney. In such prostatic, bladder stone or tumor, and urethral stricture cases, the four factors of insufficient volume, weakened concentrating power, nitrogen waste resorption, and back pressure on the kidneys all have to be considered as possible factors in the resulting rise of nonprotein nitrogen in the blood.

## II.—Uremic Symptoms and Their Causation.

The symptoms that have been called "uremic" include derangements of the brain, either local or general, vomiting, dyspnea, and eye-ground changes. Not a single one of these symptoms is absolutely diagnostic of kidney disease. It is not yet known how kidney disease causes them or that it does cause some of them. For a long time there have been 3 main theories as to their genesis:

(1) The toxic retention theory holds that waste matter which the kidney fails to excrete poisons the various organs and causes the uremic symptoms. The weak points of this are that anuria with high retention does not cause what have been regarded as typical uremic symptoms; that none of the known nitrogenous waste bodies are poisonous in the concentrations reached in human disease; that typical uremic symptoms occur when no nitrogen retention is present.

(2) The intracranial pressure theory holds that edematous increase of intracranial fluid to the point of diminishing or cutting off the blood supply of the brain causes the uremic symptoms through cere-

bral ischemia. Although it is extremely difficult to demonstrate this condition after death, this theory has never lacked adherents. It is supported by increase of lumbar pressure coincident with uremic symptoms in some cases.

(3) The arterial theory holds that sclerosis of brain vessels combined with increased blood pressure and perhaps local vascular spasm in the brain causes the symptoms called "uremic", again through cerebral ischemia. Both the edema and arterial theories suffer from the fact that uremic symptoms may occur when neither of these conditions are present.

Several other theories have been advanced but none as well grounded as those given. The difficulty in finding the cause for the so-called uremic manifestations is that they do not constitute a true clinical entity and are not all due to a single cause. Some of them are caused by a retention of nitrogenous waste, and this clinical picture, which can occur without either sclerosis, hypertension, or cerebral edema, constitutes "true" uremia. Many so-called uremic symptoms, on the other hand, and among them some of the most striking, may occur when there is no nitrogen retention and these clinical symptoms are well named by Volhard "false" uremia. When such false uremic symptoms occur without N retention, either brain edema, hypertension or cerebral sclerosis is almost invariably present. Moreover the false symptoms may be separated into (1) those of sudden development, so similar to puerperal eclampsia that they may be termed false eclamptic uremia and, (2) those of more gradual development and longer duration, very obstinate and liable to recur, which may be termed false chronic uremia. There is, however, no criterion either in their symptoms or their lesions for sharply distinguishing these 2 groups of false uremias. In general the eclamptic form depends on edematous increase of intracranial pressure, the chronic form on spasm of sclerosed brain vessels.

**TRUE UREMIA.** In this, nitrogen retention is invariably present, the NPN figures being well over 100 mg. per 100 c.c. of blood, before symptoms appear, and death occurring with figures varying from 250 to 500 mg. The reason for these wide variations in the amounts of NPN and of urea in the blood when death occurs is that these are not the substances which kill. The lethal substance, yet unknown, occurs in some proportion to known nitrogenous waste substances, but this proportion varies, so that some patients die with an NPN a little over 200 while others recover when 400 has been passed. It is not believed that the lethal substance can reach dangerous amounts unless the NPN is at least 200.

This clinical picture is not typical of any one form of renal disease but occurs whenever the urea and other nitrogenous waste rises to the above figures, no matter what the cause. So it is seen alike in the

anurias of bichlorid and of acute nephritis with scarlet, in the late stages of chronic nephritis, in cystic kidneys, in hydronephrosis, after surgical operations, in bad septic kidneys and in advanced renal tuberculosis. The onset is gradual with remissions corresponding to periods of improved nitrogen elimination. It comes on with mental torpor, bodily weakness and progressive emaciation. There is irritability combined with dullness; insomnia with somnolence. Delirium is slight or absent. Muscle twitchings are frequent toward the end, but general convulsions are notable for their absence, though they do very rarely occur. Finally, stupor and coma supervene. Dyspeptic symptoms are pronounced and may dominate the picture; anorexia, hiccough, nausea and vomiting, the vomitus sometimes containing urea in excess; thirst followed by dry mouth and stomatitis, often ulcerative. There is an especial liability to noninfectious pericarditis. Secondary infections are also frequent. Pruritus is frequent and macular uremic rashes occasional. Urea frost may appear on the skin shortly before death. The breathing may be of the Kussmaul type, as before diabetic coma; at other times it is irregular in rhythm. Body temperature tends to fall. There is no constant relation to the height of blood pressure and antecedent high pressure may fall towards the end. True uremia is not benefited by lumbar puncture or blood-letting.

**FALSE ECLAMPTIC UREMIA.** This includes almost all the convulsions of renal disease. These occur chiefly in acute nephritis, especially in children, and in the late stages of chronic nephritis. Exactly similar seizures often occur in childbirth. Widai recognized their cause as edema of the brain and believed them due solely to salt retention. Volhard concurs in edema as their cause but does not believe salt retention essential. The basic cause is pressure on the brain tissue which must occur when the content of the skull is sufficiently increased. The quicker and larger the increase the more likely the convulsion. Such an increase of contents and of pressure is especially likely to be produced by fluid but it will make little difference whether the fluid is outside the brain, inside the ventricles or in the brain substance itself.

In support of this intracranial pressure theory the following facts can be marshalled. Convulsions occur without nitrogen retention. The cerebrospinal pressure is regularly high as shown by lumbar puncture and in cases where it was low the brain stem has been found jammed into the foramen magnum after death. Relief of the pressure by lumbar puncture or blood-letting may immediately relieve the symptom. Choked disk not infrequently is present. Convulsions and all the symptoms to be presently described as belonging to this condition can be produced by brain pressure, either observed in animal experiments or clinically and there is no single poison which can produce them all. In many cases the brain after death is found to crowd against the skull but the demonstration of increased intracranial pressure after death is obviously



impossible in many cases because it leaves out of account the vascular erection of the brain and is apt to miss the effects of blocked venous outflow from this cause. The pial fluid escapes as soon as the skull is opened nor is its excess an evidence of antecedent increased pressure because when the convolutions atrophy a compensatory increase of this fluid occurs. Excess of ventricular fluid with flattened convolutions does indicate antecedent pressure but does not tell how rapidly it developed. Altogether, conclusions about intracranial pressure during life must be reached with great caution from postmortem findings alone.

Another factor in eclamptic uremia is blood pressure. This is almost always high and often each seizure is preceded and accompanied by a marked extra elevation, so that a causal effect is hard to deny. The convulsions are sudden and severe. They consist of a tonic spasm followed by clonic contractions. Consciousness is regularly lost at the outset. Premonitory symptoms are severe headache, torpor, intense irritability, vomiting and puffiness of the face. There may also be antecedent stiff neck with Kernig's sign and exaggerated reflexes, including the Babinski. During the convulsions the pupils are narrow, the pulse slow and hard; the initial pallor changes to cyanosis because of the embarrassed respiration, but pallor returns as respiration is reestablished. The temperature is apt to be raised. The seizures tend to recur, sometimes many times, and consciousness may not be regained between. The convulsions are followed by coma, confusion and loss of memory. The regular convulsions may be replaced by symptoms of irritation or paralysis of local brain areas such as Jacksonian seizure, sudden blindness, aphasia, local losses of sensation, ataxias, choreas or Cheyne Stokes' breathing or by symptoms of general disturbance such as coma or general muscle twitchings. Cerebral symptoms usually overshadow those of the lower centers, probably because of greater cerebral sensitiveness to pressure.

While the condition may occur when general edema is massive it is more usually seen with only a slight puffiness confined to the face. The condition is a very grave one and if untreated frequently ends in early death. Treatment, however, is very effective and consists in relieving the pressure by blood-letting and lumbar puncture, complete quiet and salt and fluid privation.

**FALSE CHRONIC UREMIA.** This term is used to designate a group of cerebral symptoms, mostly focal, that often occur with Bright's disease but often also without it. They are believed to be caused by ischemia of the brain tissue resulting from cerebral sclerosis combined with focal and general vascular spasm. In simple cerebral endarteritis both stenosis and local spasm occur and may lead to thrombosis, softening and hemorrhage. Focal or general brain symptoms occur, however, with no demonstrable lesion except the sclerosis. When such symptoms, without gross brain lesion, occur with Bright's disease they constitute

a false chronic uremia. The only difference then, between the clinical picture of cerebral endarteritis without other brain lesions and that of false chronic uremia are coincident general hypertension and the associated symptoms of renal disease such as urinary changes, dropsy and dyspnea. The same vicious response that makes sclerosed vessels contract instead of dilating when the tissue they supply calls for more blood seems to occur in the brain as well as in other parts of the body, so that activity leads to limitation. The contradiction between lesions and symptoms that belongs to sclerosis in general is also seen here. There are cases of marked lesions with no symptoms; cases of moderate lesions with fatal symptoms; cases with symptoms of deterioration coming on gradually as the lesion; cases with the sudden development of symptoms based on a latent lesion of long standing; cases of intermittent symptoms with a constant lesion.

Except that convulsions are rare, there is no essential criterion to distinguish this form of false uremia from the eclamptic. In general the symptoms are slower in development, obstinate and unyielding to treatment. They often come in repeated attacks, due to spasm, each attack followed by recovery until the stenosis gets too narrow, when the functional loss becomes permanent. On the other hand, when sclerosis without spasm dominates the picture the deterioration of function will advance gradually. The general symptoms include loss of mental and physical power and loss of flesh, headache, often persistent and intense, dizziness and cerebral vomiting. The psychic symptoms, often pronounced, include mental confusion, delusions and hallucinations, and emotional instability and irritability. The focal symptoms may be aphasia, hemianopsia, monoplegia and hemiplegia, intermittent limping, and the "dead finger" and Cheyne Stokes' breathing. Ischemia of the retinal and cutaneous (finger) vessels, and epistaxis, are taken as indications of concomitant spasm of the brain vessels.

Volhard gives an interesting explanation of Cheyne Stokes' breathing which occurs in both forms of false uremia. With brain edema, when the intracranial pressure surpasses the diastolic pressure, the blood supply of the respiratory center is compromised, and breathing gradually ceases. The rising  $\text{CO}_2$  stimulates the vasoconstrictor center, raises the blood pressure above the intracranial, enough blood reaches the respiratory center, and respiration is gradually resumed. This symptom, then, results from an even balance between intracranial and blood pressure, the breathing falling and rising as the balance swings first to one side and then to the other. A similar functional alteration can result when a stenosed vessel furnishes a little less than the required amount of blood.

The shortness of breath that is a classical symptom of Bright's has often been considered in part toxic or uremic but probably it is purely circulatory. The night orthopnea that is so terrible when well

developed, Volhard believes due to a resorption during the rest of edema fluid transuded during the day. This is indicated by the nocturia and results in an increase of the blood volume which the heart cannot stand. Volhard says that it can almost always be cured by stopping all fluid intake after midday.

The retinal changes have long been regarded as uremic but there is a modern tendency to look on them also as circulatory and not toxic. A combination of diseased vessels and spasms is thought to produce them. Whatever their explanation, they are still considered as of most ominous prognosis in Bright's disease by practically all observers.

False uremia as a whole, then, depends on circulatory changes, either capillary permeability, sclerosis or vascular spasm. The extent and location of the ischemia determines the nature of the symptoms. The difficulty in understanding "uremia" lies not only in analyzing it into its component parts, as just outlined, but in appreciating that pure types are rare, and that its different components are apt to be mixed in varying proportions in most cases. It is a nice problem to unravel the different factors and to treat them intelligently.

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## APPENDICITIS.

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Appendicitis usually results from an enterogenous infection; hematogenous infection, as a result of a general infection and involvement of the bowels from streptococci or staphylococci, being rare. It may occur in blood infections, if the appendix is the site of least resistance, due to deposit of live bacteria lodged in phagocytes. The first changes occurring are in the sinuses and crypts of the mucosa and gradually spread through the walls, causing leukocytic infiltration. The inciting bacteria are usually Gram-positive diplococci and fine bacilli, colon bacilli and, especially, anaërobic bacteria. They may be both endogenous and exogenous in origin. A local tendency of the appendix to acute inflammation is usually acquired, and it is favored by general hyperplasia of the lymphoid apparatus. Appendicitis frequently occurs during the course of such general infections as grip, scarlatina and typhoid fever, suggesting an infection transmitted to the appendix by way of the blood.

It has been said that appendicitis is an intestinal localization of a general infection, but this does not explain the occurrence of appendicitis in apparently normal individuals, which must therefore be a secondary localization of a focal infection. The tonsils are the principal



sites of primary infection, being exposed to various pathologic processes. The appendix is an organ of deficient circulation and in process of retrograde metamorphosis. It is essentially made up of lymphoid tissue, which is known to be extremely sensitive to bacterial infection. Other factors also favor this secondary localization, such as constipation, traumatism and family predisposition. Trauma does not initiate an original inflammation in the healthy appendix but no doubt does bring about an acute exacerbation of a previously existing inflammation in the appendix. The overloaded cecum in constipation prevents proper emptying of the appendix and after a time an acute inflammation will develop. It does seem to be more prevalent in some families than others. I can recall having operated upon several members of one family for acute appendicitis. Tuberculosis of this organ may be primary or secondary; I had a case recently of primary tuberculosis of the appendix in which there was considerable involvement of the mesentery, but the patient finally made a recovery after drainage for 3 or 4 months. Primary carcinoma of the appendix is also possible. Last year I saw a case but did not recognize it until the secondary growth appeared in the drainage tract and a section of the latter growth showed adenocarcinoma. The growth involved the cecum and the skin and, finally, the patient died. If we could have every appendix removed examined by a pathologist, we would doubtless find a larger percentage of primary tuberculosis and cancer than is supposed to exist.

The symptoms of appendicitis are, in order of their importance, *Pain-Tenderness-Rigidity-Nausea or Vomiting-Leukocytosis and Fever*. The initial pain is usually paroxysmal or cramp-like. It will wake a patient up at night or stop him from his work. It is referred to the epigastric or mesogastric region, at first, and within 12 to 24 hours localizes in the lower right quadrant. Of course the pain may appear elsewhere in the abdomen, even in the left side, up under the liver, or down over the bladder, because it varies in location. Tenderness is usually found early in the right quadrant and most frequently at McBurney's point but, like the pain, it may be down over the bladder, or in the midline, or even in the left side or up under the liver. Rigidity of the right rectus is a very constant symptom and usually means a very sick appendix with a beginning localized peritonitis. Nausea is present in almost every case, in the beginning, some patients may vomit once or twice, and it may continue for 24 hours.

Leukocytosis is present in almost every case and is a fair guide to the progress of the disease. The white blood cell count is usually high early in the attack and if the patient has good resistance it remains high. As the inflammation increases there will be an increase in the polymorphonuclear count. The increase of these cells means the presence of pus. To illustrate: a blood picture of 90% polynuclears, or over, with a white blood count of 18,000 up, usually means pus, al-

though you may have a much higher white count with a polynuclear count of 75% or 80% and still not have pus present. The blood examination should be made every 2 or 3 hours in doubtful cases and your method of treatment governed accordingly. Fever may or may not be present, it is usually around  $100^{\circ}$  to  $102^{\circ}$ ; if it is up around  $103^{\circ}$  to  $104^{\circ}$ , especially in children, I believe it is a sign of severe infection and we should be guarded in prognosis. The pulse rate is usually increased out of proportion to the temperature, but like temperature it is not a safe guide.

Most surgeons have had the experience of removing a gangrenous or dead appendix many times, with the temperature and pulse at normal. Sudden cessation of pain is a bad sign; Murphy used to say it was the last call for operation. It means that the appendix has become dead or gangrenous, or has ruptured. The slow disappearance of pain may mean that the severity of the attack is over and that convalescence has started. In the fulminating type of appendicitis, the pain usually starts in the midgastric region and is so severe that it overshadows the pain in the right lower quadrant, and within a few hours one notes the symptoms of a rapidly developing peritonitis due to early rupture of the appendix. In this type, tenderness is perhaps the best symptom to rely upon. If you have a definite tenderness over the region of McBurney's point in a child, the sooner that appendix is removed the better.

*Diagnosis.* In making a diagnosis of acute appendicitis one must differentiate, calculus in the right ureter, biliary colic, rupture of gall-bladder, cholecystitis, ulcer of the duodenum or stomach, acute pancreatitis, twisted pedicle of an ovarian cyst, ruptured ovarian cyst, tubal disease on the right side, right-sided pneumonia, ruptured tubal pregnancy, strangulated hernia, acute gastro-intestinal colic, diverticulitis, Dietl's crisis due to kinking of the ureter in a moveable kidney, and hysteria.

As to chronic appendicitis, many cases of neurasthenia, hyperacidity, visceroptosis and hysteria have been operated upon for appendicitis. Many of the diseases mentioned can only be diagnosed positively after the abdomen is opened and rightly so, because they all come under the category of "acute abdomen" and all must be operated upon early if you hope to cure your patient. In children particularly we must differentiate a right-sided pneumonia, and a thorough examination should be made of the right lung. But you must bear in mind that it is possible to have a pneumonia and an acute appendicitis at the same time. I remember a few years ago having such a case on which we operated and found an appendix enlarged, inflamed and filled with pus; a rapid operation was done and the patient ran a typical pneumonia course, with crisis on the sixth day, following a dose of pneumonia-serum, and made a good recovery. If I should have a similar case today, I would operate under local anesthesia. When you have the typical pain, tenderness and rigid-

ity, with nausea or vomiting, and a slight rise of temperature, with tenderness localized over McBurney's point, there can be little doubt of the diagnosis.

There are several special signs that help elicit the pain and tenderness: In 1910 Blumberg described the following symptom. If in acute appendicitis the ileocecal region be palpated and the palpating hand suddenly lifted up, the pain is markedly increased. It is not unusual for the palpation in itself to be painless and for the pain to appear only when the palpating fingers are lifted with a jerk. It is necessary that the palpating fingers should have penetrated to a certain depth. This symptom has special importance in appendicitis for it renders it possible to make a diagnosis of acute appendicitis at a time when there are no other signs of it either in the history or on palpation, and it is also of importance after the acute stage of appendicitis has passed. This symptom is also found in tuberculous peritonitis in the beginning stages when other clinical signs are lacking. When this sign is present you will often find the appendix is retrocecal.

In 1923, Livingston described a skin sign; a line from the umbilicus to the highest point on the right iliac crest forms the upper side, a line from this point to the right pubic spine its lower side, and a line from the right pubic spine to the umbilicus closes the triangle. The form of test used is a vigorous twisting pinch of sufficient intensity to produce discomfort on the normal skin. This becomes exceedingly painful when applied with the same intensity over this triangle if the appendix is involved. It is important to consider as positive only those cases in which the increased sensitivity upon the anterior abdominal wall is within the triangle described, while cases in which the maximal intensity is beyond the borders should be considered negative. Skin signs thus elicited and thus localized constitute evidence of great value in diagnosis of acute appendicitis. Of 119 cases reported, 101 presented positive signs and 18 negative; in all negative cases with appendicitis the organ was either gangrenous or ruptured.

Dr. A. Gregory, of Leipsig, says that percussion of the left half of the abdomen, especially in the middle of a line connecting the umbilicus and the anterior superior spine of the ilium produces, in appendicitis, pain at McBurney's point. This pain is explained by the transmission of the percussive commotion to the inflamed appendix, and it is, therefore, more marked by percussing in the middle between the umbilicus and the anterior superior spine, while percussing more laterally the commotion communicated to the underlying descending colon is transmitted less clearly to the inflammatory focus. Percussing, on the other hand, near the medial line, the propagation of the commotion is prevented by contraction of the recti muscles. Percussion between the umbilicus and the anterior superior spine of the ilium in the left side (corresponding to McBurney's point) causes a commotion of the small intes-



tine, which is transmitted to the diseased appendix and the pain is felt at McBurney's point. The sign is clearest in acute and subacute appendicitis, and only a slight percussion is needed to produce violent pain at McBurney's point. In some cases of median position of the appendix with adhesions to the small intestine the pain is also felt at the umbilicus and in the epigastrium. If the appendix is in the pelvic region, the pain is felt above the symphysis pubis. In some cases, therefore, the sign makes a precise pathologic diagnosis possible. Another method is to make deep pressure under the lower border of the liver and have the patient cough; this causes sharp pain at McBurney's point.

Honan, in a recent paper, said that deep finger-point pressure one-half inch to right of umbilicus causes severe pain and signifies an enterolith in the appendix; this he had verified a number of times at operation. In doubtful cases, a rectal examination will be of great help in eliciting pain at McBurney's point and oftentimes one can thus determine whether an abscess is present.

Chronic appendicitis, like syphilis, can at times simulate disease of any organ in the abdomen. Master surgeons admit operating upon patients, from time to time, for gastric ulcer or cholecystitis, when chronic appendicitis was the only lesion to be found. If these mistakes are admitted by our foremost surgeons, how many times must the error occur in hands of those who are less proficient? Kraussold reports, after a very large number of autopsies, that one-third of all adult bodies reveal a diseased appendix. The same general percentage is reported by Deaver, Hawkins and others. When a "normal appendix" has been removed in the course of an operation for cholecystitis or gastric ulcer, it has usually been found to be really diseased; this is true in about 60% of cases. Chronic appendicitis, therefore, occurs much more frequently than is generally supposed and is perhaps the cause of disease in various other abdominal organs. Deaver states that chronic appendicitis is the most common of all abdominal diseases. It must be borne in mind that a pathologic report stating that the appendix is "normal", or the seat of mild chronic inflammation, does not prove that the patient was unnecessarily subjected to surgery. Pain and reflex gastric disturbances are very important symptoms in this disease and either or both of them may be due to an appendix that is unduly twisted by its mesentery or bound down by adventitious adhesions.

Chronic appendicitis occurs at any age in both sexes. Pain is its most prominent symptom. The pain, which is situated in the region of the appendix, varies in character and may be constant or occasional, intermittent or remittent, sharp or dull, or so vague as to be hardly noticeable. It is often of a dull, aching character down in the lower right quadrant. It bears no relation to the intake of food and may be present at any hour of day or night. One's attention is generally attracted to it by its persistence, not by its severity. The next symptom of importance

is tenderness; on deep palpation over the appendix a sense of soreness or tenderness is quite easily elicited. A mild degree of rigidity of the right rectus muscle is usually present. Percussion will demonstrate a cecum and ascending colon distended with gas. Constipation is the rule especially in females, but not uncommonly occasional attacks of diarrhea occur. Nausea, regardless of the type or quantity of food taken, is a very important diagnostic aid in these cases. This varies in degree from a mere suggestion to one in which vomiting could easily be induced. Indigestion is a most pronounced symptom. It occurs at any hour of the day or night and bears no relation to the intake of food or to the kind of food ingested. It is generally evinced by a feeling of fullness or distress in the region of the umbilicus, followed by the eructation of a considerable amount of gas. It is generally transitory and all these digestive symptoms are probably due to pyloric spasm, with increased secretion and increased acidity.

Chronic appendicitis is not a mental condition but a true pathologic process, a symptom-producing disease. It requires study and an accurate differential diagnosis. The close lymphatic association between the appendix, the gall-bladder and the stomach should be a warning of the probability of disease of the latter organs, if a diseased appendix is allowed to remain. The diagnosis of chronic appendicitis is difficult unless you have a history of one or more previous attacks; some writers claim that without such a history there is no chronic appendicitis and removing the appendix will not benefit the patient. I can hardly agree with this, but I do think that we must be particularly careful in diagnosis. As I said before, there are no definite symptoms to guide us, but in the last few years the roentgenologist has been of great help. I believe every case of so-called chronic appendicitis, unless we have a history of one or more previous definite attacks, should have a thorough x-ray examination. According to most observers, the various points of interest to be sought for in the x-ray examination are: presence of tenderness over the appendix shadow, variations in the shape of the barium-filled appendix, abnormal position, fixation, retention of barium within the appendical lumen for an abnormally long time, presence of enteroliths within the lumen, abnormal position or adhesions of the terminal ileum or cecum, incompetent ileocecal valve, ileac stasis, and abnormalities of gastric function without any pathology in the stomach or duodenum to account for it.

Granting ordinary palpatory skill on the part of the roentgenologist, palpation under fluoroscopic control possesses advantages over simple palpation. Demonstration of a point of definite, persistent, localized tenderness which has its maximum intensity directly over the position of the appendix, as determined fluoroscopically, indicates the presence of appendiceal inflammation. Evidence of adhesions affecting the appendix indicates pathology. Other

signs are less valuable. Pathology cannot be positively excluded by x-ray examination, but in certain cases negative findings are of distinct value.

*Treatment.*—The treatment of acute appendicitis is strictly surgical. The time to operate is as soon as you have made the diagnosis, whether the laboratory findings agree with your diagnosis or not. I mean by that, if you know you have a definite acute appendicitis, do not delay to get a blood count, because delay in these cases is vital. If you are not sure of your diagnosis, then have all the laboratory examinations made that are necessary. The late Dr. Osler said that in acute appendicitis the surgeon can be called too late, but never too early. Deaver says that when to operate in acute appendicitis depends not upon the blood count, but upon the physical examination and the condition of the patient.

In the delayed case it is often impossible to make a definite diagnosis as to the cause of trouble. Such cases have been characterized by Dr. Maurice Richardson as, too early for a late operation and too late for an early operation; in other words, in such cases, diffuse peritonitis has set in. These cases should be placed in a hospital on the Oschner treatment, consisting of Fowler's position, ice-bag to abdomen, Murphy drip of saline or bicarbonate of soda, or glucose solutions and just enough morphia to relieve the pain, and gastric lavage. Repeated laboratory examinations should be made and as soon as the appendix is known to be the cause of trouble, open the abdomen and drain. The appendiceal abscess should be opened and drained and, if the appendix cannot be located without spreading the infection, leave it alone.

After a definite diagnosis of chronic appendicitis is made, remove the appendix, not through a right rectus incision, but through one that you can enlarge to thoroughly explore the whole abdomen. A great many of the failures in operations for chronic appendicitis have been due to removing the appendix through a small incision and not exploring the whole abdominal cavity to see whether there was any other pathology present.

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### MELANOTIC CARCINOMA.

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The function of pigments in the biologic world seem to be the same as the function of pigments in the industrial world, either decorative or protective. As regards pigment melanin, there is no essential difference whether it be in the skin of a negro, the ink of the



cuttle fish or the melanotic tumor; the pigment is formed from a colorless mother-substance which becomes oxidized to melanin. We are in complete ignorance of the laws which govern the pathologic development of this pigment in melanotic cancer.

The melanotic pigment begins to appear in the epithelial cells forming the outer layer of the optic cup in the human fetus in the fourth month. Full pigmentation of the posterior layer of the iris is not complete at birth. No useful purpose has yet been assigned to the collection of pigmented cells scattered among the internal structures. Some races of mankind have a pigment, melanin, which, together with a free secretion from the skin, serves to protect the central nervous system against the effects of sunlight and enables such races to work under the sun in the tropics because the pigment prevents injury from the ultraviolet light rays. Races inhabiting colder regions, with much less pigment in the skin, have scattered collections of pigmented cells, or melanomas. These have the characteristics of "congenital rests" which, although they show no outward change yet, as life goes on, undergo an insidious degeneration, and without any sharp line of demarcation the degeneration may pass to the formation of a new growth,—melanotic cancer.

Subject to individual differences, this malignant change tends to arise in the later periods of life. In man, melanotic cancer is a relatively rare form but it has the peculiarity that 2 factors are associated, i.e., a proliferation of cells and a multiplication of the melanin pigment. The degeneration of the "congenital rests" into melanotic cancers cannot be prevented nor the further course of the disease controlled. Once the malignant change has started, even though there is no clinical manifestation of it, a metastasis sets in forthwith. The secondary growths, however, displace rather than infiltrate, so that the metastasis may not become apparent for a long while. Moreover, through various causes, pigmented patches may be acquired which also tend to undergo malignant degeneration.

It is remarkable that these growths spread with great rapidity and lead to a fatal termination very quickly after any recurrence. This suggests that the new manifestation is due to a breakdown in the resistance of the individual rather than to a sudden activity of the disease, for, actually or potentially, the disease must have been present the whole time and presumably kept in bounds by the resistance of the patient.

Quoting from a recent article upon this subject from the A.M.A. Journal: "Melanoma, or melanotic carcinoma, spoken of by some on account of its origin as nevus cancer, may spring from pigmented moles or from a precancerous process with pigment formation, such as is spoken of by Dubreuilh as 'circumscribed precancerous melanosis'. It is a well known clinical fact that pigmented moles are dangerous principally in their proclivity to malignant degeneration,

which one can readily understand from the study of the histology of the lesion, as they are composed of embryonic cells kept, as Unna says, on an attenuated and less resistant cutis. Therefore, injury in any form to the cells composing the nevus is dangerous.

According to Wilfrid Fox, a mole may become malignant in any one of 4 ways: (1) The mole may ulcerate and bleed and then perhaps heal slightly, but during this period the neighboring lymphatic glands may be noticed to be enlarged, with pigmented secondary growths; these ulcerations increase to a greater size than the primary growths, and after the ulceration of the skin, discharge an inky fluid. (2) The mole may increase in size, forming a permanent tumor and becoming much deeper in color; without any ulceration, secondary growths may appear in the neighboring lymph glands and almost simultaneously in all parts of the body as small deposits of pigment in the skin, the patient finally dying from cachexia and interference with some vital organs by the secondary growth. (3) More rarely, there may be no change in the mole at all, and the first sign of malignancy noticed is the presence of metastasis. (4) The mole may become active, with little secondary black dots about it from permeation with the lymphatics, the mass eventually forming the so-called melanotic rodent ulcer with no secondary growths in the lymphatic glands or elsewhere.

Clinical observation has confirmed the fact time and again that apparently simple blackly pigmented nevi may at any age begin to take on active growth which will result in malignancy and the death of the patient. That in the large majority of instances they are of epithelial genesis is now accepted, although certain moles and soft nevi that become malignant may spring from the endothelium, or possibly, as Ribbert asserts, they are the result of 'chromatophores'. The 'circumscribed precancerous melanosis' of Dubreuilh frequently occurs on the feet of old persons from some slight injury and exists in more or less inactive, latent state for some time, when for some reason they become active, showing exudation and the formation of pigment, which extends laterally and into the lymphatics by permeation, with subsequent metastasis. The melanotic whitlow of Hutchinson is a curious growth occurring on the finger in the form of an onychia ulceration following some slight injury. Pigmentation supervenes after the injury, the lesion becoming bluish-black and ulcerating and oozing a dark fluid, which may stain the dressing. The accumulation of pigment that occurs around the temple and edges of the hair in old persons without the clinical appearance of seborrheic wart but somewhat scaling, frequently becomes papillomatous and sometimes degenerates into a pigmented cancer. This, no doubt should be classified with Dubreuilh's 'circumscribed precancerous melanosis'. They, however, rarely become malignant unless frequently stimulated by inefficient and improper treatment.

We might say that types of melanotic carcinomas are almost benign in their slow extension and nonmalignant behavior."

Pathology according to Stengel: "Melanotic or pigmented carcinoma is that form in which both the epithelium and connective tissue frame-work of the cancer are richly supplied with blood-vessels and, probably, as a consequence of transudation from the latter, with an abundance of pigment granules in groups and clusters. These growths usually begin as hemp-seed to pea-sized; single or numerous, soft or dense, nodules, which may develop in time into tumors of considerable size, and which are stained in various shades from a grayish brown or a slate color to a dead black, the pigment being occasionally displayed irregularly in streaks or bands over the surface of the growth. Anatomically, the pigment is found to be deposited both between the cells and in the protoplasm of the cells themselves. Chemically, according to the studies of Berdez and Neucki this pigment contains no iron, and is therefore not simply blood pigment. Ferruginous pigment has been found by certain authors but is always outside the cells and hence probably accidental, resulting from hemorrhagic extravasation. Tumors of this type have no special characteristics other than the pigment. Structurally, they may be round or spindle celled; frequently it is angiosarcomatous or carcinomatous and alveolar in type."

Recent investigations indicate that the majority, if not all, of the malignant pigmented growths which spring from moles and nevi and which in the past have been considered to be sarcomatous are in fact instances of pigmented carcinoma. The case I am privileged to report to you fully sustains this contention.

Etiology.—No more has been learned of the true or real cause of melanocarcinoma than any of the other types of malignancy. As heretofore stated, the growths of this character are, in most cases metastatic, arising from pigmented moles or nevi, although primary cases have been reported around the anogenital region and in the eyeball. In the latter, it has been said to follow an injury. However, there is a vast amount of detailed work and scientific investigation yet to be covered before the obscurity, which now surrounds the etiology of this as of all other varieties of malignancy can be cleared away.

The case I shall now attempt to describe and, through her very gracious coöperation, to present to you is that of a young married woman 25 years of age. As you will observe she is rather stout, well-developed and perfectly healthy in appearance. She has had no children. About 5 years ago she had a miscarriage at the third month of gestation, which was apparently spontaneous following some unusually strenuous household activity.

Family history: Father alive and in good health. Mother died at the age of 34, at which time the patient was 9 years of age. The



cause of death was some paralytic condition which had confined her to a wheelchair for many years. In fact, the patient states that she never remembers her mother walking. Other details of this condition were unobtainable. Another possible point of interest in the maternal history was a tumor which developed upon one side of the nose near the inner canthus of the eye, which was cured by some cauterizing method or, as described, "was burned out". Of course there is no way to determine or even hardly surmise the pathology of this growth. There are 2 sisters in most excellent health.

Past history: Other than some of the minor ailments of child-



hood, this young woman has been perfectly well all her life. She is a lover of the out-of-door life and spends much time in the open.

Present illness: In the fall of 1919, according to the records of Dr. Hermann, the patient came to his office to consult him relative to a growth about the size of a dime and quite black appearing on the skin slightly downward and forward from the angle of the left jaw. It was slightly elevated and surrounded by a small rather faint area of inflammation. At this time the patient stated that recently it had been growing large and felt considerably irritated. The treatment employed by Dr. Hermann at that time consisted of 2 erythema doses of a nonfiltered ray, and the growth promptly proceeded to disappear leaving no trace of its previous existence. About one week later she developed quite a severe sore throat which at first appeared septic in type but soon took on the characteristics of diphtheritic infection. Clinically, all symptoms were positive and recovery was prompt following the administration of antitoxin, although cultures were persistently negative.

In November, 1923, this patient came to Dr. Leonard's office

regarding a growth appearing under the lobe of left ear apparently involving the parotid gland. My first impression was either an adenitis arising from some focal infection, although no pain and very slight tenderness was present, or possibly a cystic affair. The tonsils appearing of negative importance, an x-ray of the teeth was decided upon and was also found negative. At this time I was unaware of her experience with Dr. Hermann and the mole. She suffered no particular inconvenience subjectively from this growth and her interest was more from a cosmetic standpoint than otherwise. Evidently thinking it of little importance, since it was not painful, or that I knew very little about it (in which belief she was not far wrong) I saw no more of her until the latter days of January, 1924. At this time, the growth was somewhat larger, being about the size of a lemon. On palpation of the tumor, there was a marked sense of fluctuation, so I attempted to aspirate for diagnostic evidence but with no results other than a drop of very dark blood which appeared after withdrawal of the needle. I then decided upon an exploratory incision.

Patient entered the hospital February 1 and the following day, with general anesthesia, an incision about 2 inches long, beginning slightly posterior to the lobe of left ear was made downward, passing over the most prominent part of the growth. With blunt dissection, an opening was made into the substance of the parotid gland. From this cavity, we removed a mass of dirty black material, very friable, and in appearance much like a piece of placenta of very ancient vintage. The cavity was cleaned of this material as much as possible and packed with iodoform gauze. No attempt was made to disturb any portion of the gland itself. Wound closed with interrupted silk sutures. The following day there was a sharp rise of temperature to  $103^{\circ}$ , which gradually returned to normal in 3 days. Healing seemed to progress favorably, the packing being removed gradually, and she left the hospital on February 8. Our complacency in the matter was somewhat disturbed, however, upon receipt of report from the pathologist to whom had been sent the contents of the tumor; melanotic carcinoma, and we began to realize we had a serious proposition with which to contend.

On March 11, the patient was readmitted to the hospital and 3 radium needles, each 12.5 mg., were implanted at the operative field; being removed in 7 hours, and she returned to her home the following day. The needles were placed subcutaneously about 1 in. apart at right angles to the original incision. It was our intention to use 4 needles but the area involved did not seem to necessitate the fourth. There followed quite extensive sloughing and ulceration with a surrounding area of intense radium dermatitis. This continued for many weeks and all our efforts with all sorts of surgical dressings failed to stop the ulcerative process, even the discharge

seemed to have a very destructive effect upon the entire cutaneous borders. There was some proliferation of very sluggish, low grade granulations upon the exposed muscular surface composing the base of the ulcer. After all these weeks of persistent effort to stop this destructive process with no success, we began to feel some apprehension, for it was now about 4 inches in diameter, its center extending downward from the lobe of the ear. During this time she received at monthly intervals radiation of mediastinum front and back, and also the submaxillary and supraclavicular spaces. A suberythema dose of a moderately heavy, filtered x-ray was used.

Uncertain whether we were dealing with a pure radium ulcer or a recurrence of the malignancy we sent the patient to Dr. Colley, who is our guest this evening, for advise and consolation. We are very grateful to say that we obtained both. At his suggestion, and with combined surgery and endothermy, we removed all of the sloughing and broken down material. Personally, I was much interested to reexplore the original cavity, which I did and was much pleased to find no more of the melanotic tissue therein.

I then turned the field over to Dr. Hermann, who very thoroughly treated the entire ulcerated area and adjacent cutaneous borders by electrocoagulation. Here, another item of considerable importance claimed our serious consideration, the facial nerve. Previous to this operation, however, we had thoroughly explained to the patient that some facial distortion might result, but much to our satisfaction the nerve remained undamaged and her smile is as you will observe, normally symmetrical. Following this, progress was slow but much more satisfactory. The dressings consisted of mild antiseptics and surgical cold-cream, together with long exposures to sunlight. This latter agent I believe contributed much to the successful healing of this very stubborn ulcer. Permit me at this point to state what should, perhaps, have been mentioned earlier; that, following the first operation, several radiographs of the mediastinum were made in an effort to obtain evidence of any further metastasis but fortunately all plates were negative. The prognosis of this case I shall not discuss as my acquaintance with this type of malignancy is too limited. I think this can very fittingly be left to the discussion to follow.

In conclusion, I have only this observation to make, that inasmuch as 3 years elapsed from appearance of the mole to the beginning of any evidence of metastasis, and that the progress of the growth was very slow for another year, that either it was very atypical for its class or the patient possessed excellent powers of resistance or perhaps both these factors were present.



## Esthetics

### SPECTEMUR AGENDO.

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It is said that "All work and no play makes Jack a dull boy". This statement undoubtedly applies to Medicine. The constant grind, seeing the suffering and hearing of the ills and troubles of others, besides having trials and tribulations of our own to contend with, seems to make the above statement particularly applicable to the doctor.

'Tis true that a great number of us have some diversion; in golf, travel, reading and even attending medical meetings, but, in all of these, when two or more physicians meet, the topic of their conversation is Medicine; a laudable topic truly, but it is the same old grind and not diversifying.

What, then, is a diversion that we can all enjoy; that lifts us out of this depressing grind, makes us forget pain, suffering; in fact, lifts us from ourselves and in the end makes us more able to cope with conditions, that we, as physicians, from day to day encounter? MUSIC.

It was to this end, a little over a year ago, in a colleague's office, that a PHYSICIANS' ORCHESTRA had its inception, primarily to afford to its members a diversion, which, while rather foreign to the general trend of diversions in medicine, would give that, which no other diversion could give, complete relaxation. To these men who were fond of music, it was hailed with delight and entered into with the greatest enthusiasm, little knowing or caring where or to what our enthusiasm might lead.

At first we had 8 instruments: piano, banjo, 2 violins, 2 saxophones, clarinet and trombone—the latter, being very much the worse for wear and hard usage—but, nevertheless, capable of making a noise similar to that of the real article. With no leader, it was a case of go as your please and the devil take the hindmost. If your lungs or your fingers were not perfect you were more than likely to be unaware, as far as sound was concerned, that you were playing. In spite of these minor (?) defects in organization, every one had a delightful

time with the exception, perhaps, of our genial host's better half, who, when things became too *fortissimo* would take a constitutional or visit some friends, but not in the neighborhood.

As our reputation gradually leaked out, we began gaining recruits, the first one being a much-needed leader (courage is a virtue we all admire). We were taught the painful lesson that music and noise were not synonymous, although at about this period we had a volunteer for the traps (drums, cymbals and other noise-producing instruments) and it was rather difficult in a 14x16 room to keep his enthusiasm from exceeding all bounds. His favorite stunt was to drop the crash cymbal at a particular part that was stressed. "*pianissimo*". This fault, however, was soon overcome by tying the offending instrument fast to the base-drum, instead of hanging it, although, hanging was too good for it.

The saxophonists would blow into their saxes so sweetly and the tones emanating would be "anything but". Sounds strange and discordant assailed the ears of the neighborhood, keeping them more or less on the "qui vive". Dauntless we were, determined to master the intricacies of sharps and flats, common and half time.

During this formative period, we were adding to our organization constantly, rehearsing regularly and making progress, and even though cryptic remarks were passed at times about us, these served only to increase our determination.

At last the big day arrived. We were dared to perform and, with utter abandon, we accepted the challenge to play before approximately 100 of our colleagues, at a banquet, in a prominent restaurant. The evening of the "*premiere*" arrived, and, as the hour approached, the artistic(?) temperament of a few began asserting itself. Some men, not musicians, and therefore unable to appreciate this peculiar malady, accused these artists of having frigid pedal extremities. After a few rather terse explanatory remarks to these detractors and after a few of the same kind of remarks, without explanations, to the temperamental ones (emphasis on all syllables), the orchestra took their places. A hush of expectancy, and then with perfect rhythm, we struck up that inspiring aria, "California Here I Come". One of the diners, who was attached to a California outfit during the late war, swooned and fell to the floor.

On being revived, he explained his momentary weakness by saying that "never had he heard such a rendition and that he was completely overcome". We are still slightly puzzled over this remark. There being no further fatalities, the rest of the programme went over BIG, and we were voted a great success.

Our second appearance was at the fiftieth anniversary in the practice of medicine of one of our esteemed colleagues. This time, before a much larger audience (250), our orchestra too having grown to the number of 14 members, we must have outdone ourselves, for much surprise was expressed by one very distinguished guest, when informed that the orchestra was composed entirely of physicians. He was overheard to remark that we were worth at least \$500 an evening. Close figuring on our part, disclosed the fact that that meant \$35 each per evening, or \$210 per week; that heedless remark nearly lost to Newark 14 hard working Medicos. Cooler heads prevailed, however, and after an animated discussion, we decided to stick to the profession come what might, using our melody and harmony as a part of our work both in and outside of the profession. Shortly after our second recital the "Root of all Evils" started to seep into the hands of our worthy treasurer, from the well-wishers of the profession, and in less than no time we were able to purchase a piano that was placed in the Academy of Medicine, the Trustees, in the meantime, having granted us permission to practice there.

New Jersey should feel proud of the Physicians' Orchestra. It is the best in the country. In fact, it is the only one composed entirely of medical men in the United States and the second in the world, according to the A. M. A. The other one being the Physicians' Orchestra in Berlin, Ger., (A. M. A., Nov. 25, '11, vol. 57, pp. 1777). Since our last appearance, we have added several new members to our ranks. We now have a cello, viola, another saxophone, 2 more violins and an oboe. This last instrument is one of the most difficult to play, and we are indeed fortunate in having this acquisition, as oboe players are very scarce. The orchestra is open to all physicians in good standing. There are no dues. We expect and require attendance at rehearsals every Monday night unless a good reason can be given for absence. Each member owns his instrument and is expected to de-

vote a certain period of his spare time to practice during the week. Surely, this is not asking or requiring much. The good times and the enjoyment had are more than a recompense.

We wish at this time to express our deep appreciation to our friends and well-wishers of the profession, who have so kindly and willingly assisted us, both by words of encouragement and financially. We are very sincere and earnest, realizing what will be expected of us in the future and we are determined to make this organization come up to your fondest expectations, and one of which you may well be proud, hence "Spectemur Agendo".

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## Medical Ethics

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"Times have changed. Conditions are not what they used to be." How often we hear the above expression, and how well we realize the truth of the statement; although it is not always meant that things are worse than they used to be, or that we would prefer, if we could, to go back to former times. Change is inevitable, and guided by experience, life in its many phases becomes more attractive and satisfying. There have always been changes, but it is doubtful if ever they have occurred more rapidly than in the past century. The thousand and one comforts and pleasures and blessings that we enjoy which were unknown to our ancestors of but one or two generations ago are truly remarkable and bewildering. During this time, too, Medicine has changed and thanks to the genius of Pasteur and a host of studious and self-sacrificing workers, is rapidly becoming a rational and exact science. To dwell momentarily on the many advances that have been made would, while inviting, lead us from our purpose.

What cannot escape our notice is the fact that in spite of the marked increase in knowledge of the cause and prevention of disease, of the elimination of many diseases formerly scourges of the human race, of the marvellous accomplishments of surgery and the fact that these advances have added years to the average duration of human life, physicians are not held in such high regard as they were formerly. Possibly this is due to the more general diffusion of scientific knowledge through education of the laity, multiplication of papers



and magazines, etc., but whatever the cause it is felt that the standing of the medical profession in the community has undergone a change which many consider a reflection on the honorable and dignified position that it had always occupied.

The old family doctor is gone—an expression we hear frequently, though I like to think it is not said thoughtlessly nor flippantly, but with a full realization of his worth as a physician, counsellor and friend, and sincere regret at his passing. How was he able with a knowledge of medicine considerably less than ours and experience in surgery, such as the youngest member to-day might scoff at, to create such a warm place in the hearts of his patients, and such a lasting impression of kindliness and courtesy on his brother practitioner, acquaintances and friends? By realizing, I think, more thoroughly than many of us today, the dignity of his calling and the solemnity of his relations to his patients, and by the appreciation of the skill and learning of those of his colleagues, who through natural aptitude or more earnest application may have acquired greater success and renown, while at the same time being charitable and forbearing towards those who because of unavoidable exigencies may have found the struggle a hard one. Those of us who entered upon the study of medicine about the beginning of the transitional period, through which we have been passing, when specialism and post-graduate study and the introduction and elaboration of laboratory and other aids, was it is true, making the practice of medicine more scientific and accurate cannot help feeling that at the same time it was being robbed of the personal touch and influence which had always been one of its marked characteristics. It can hardly be denied that the attitude of the patient towards his physician and indeed the relations of physicians toward each other has undergone a decided change.

The writer recalls the pleasure and pride he experienced on accompanying his Preceptor on his daily drives through the city on his professional work and with what respect and almost reverence he was greeted by every one whom he met—how eagerly his visits to the sick room were awaited, what confidence and reliance were placed upon his explanation of the illness and its progress and what hopefulness and courage was shown by the patient and family

in the ability of the physician to restore the sick one to health. Such evidences of regard and esteem for the doctor as was shown by the public had a very stimulating effect on the young medical student, and must have been very consoling and encouraging to him who had the care and responsibility of many whose lives were indispensable to their family and friends.

Because of the rapid growth of cities, with their ever changing population and the increased facilities for travel it cannot be expected that the close relationship which had formerly existed between the physician and the public should continue, yet this must be a matter of regret to many who realize how mutually helpful such relations were. What is most to be regretted, however, is that the *Spirit of Medicine* is being lost. The willingness to work, the eagerness to serve, the spirit of sacrifice and self-denial, much of this is being lost, because of the changing conditions of the times, one tendency of which is to regard medicine as a business, in which any method which meets with success seems to be regarded as the proper one. Such a conception of one of the highest and most sacred callings of mankind does injustice to the humane and benevolent spirit which has always characterized the medical profession, with its record of unselfish devotion to humanity and to the noble and heroic ones whose names are illustrious because of their allegiance to its cause.

Note.—The above was written in answer to the kind invitation of the worthy Editor, for some remarks upon Medical Ethics. With his further indulgence, more may follow.

OBSERVANT.

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A green apple a day keeps the doctor on the way.—Arkansas Gazette.

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The "White House spokesman" has let himself be vaccinated—and the whole Christian Science vote has probably been lost at the scratch.—Norfolk, Virginian-Pilot.

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The evolution theory may be all right, but every time Congress is in session we fear evolution has not progressed far enough.—Des Moines Register.

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"Whadda doin' t'night?"

"Nuthin.' Whadda you doin'?"

"Nuthin.'"

"Who, else will play?"—C. C. N. Y. Mercury.



# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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## OUR ANNUAL CONVENTION.

For several months past we have been earnestly pressing upon your attention the advisability of attending the annual meeting of the State Medical Society and we hope that the Journal had something to do with the fact that this proved to be the largest gathering the Society has ever had. Registration reached the unprecedented figure of 861 and it is interesting to note that this total included 357 ladies, showing that a very considerable proportion of the members were accompanied by their wives and daughters. The Program Committee had made special arrangements for entertainment of the ladies and this evident appreciation of their efforts will encourage to still further development of the social features of these meetings.

Analysis of the attendance figures shows the presence of 24 Trustees and Fellows; 136 Permanent Delegates; 62 Annual or Alternate Annual Delegates; 165 additional Members of the Society; and 17 Visiting Physicians from other States. The total number of members of the State Society present was, therefore, 363; which rather takes the joy out of the somewhat pleasing fact that the total registration reached its highest point. The latest published membership list contains the names of 2098 active members, and we believe there are about 200 others whose names were not in hand for publication when that list was brought out. But, even with the smaller published figure, this means that considerably less than 20% of our members attended the convention. Can anyone explain why? Both the scientific and the business proceedings of these annual conventions are of vital importance to every member of the Society—and yet only 1 member out of every 6 shows any inclination to participate. Why are so many members neglectful of their own personal interests?

Some will excuse their nonattendance on the grounds that they

were too busy and could not leave home. Unquestionably, there were some whose professional engagements prevented their planning to attend or, even at the last moment, compelled them to forego the pleasures and privileges in contemplation, but we do not believe that anywhere near 80% of our members can take refuge behind this legitimate excuse. It is our own private opinion that a very large number failed to attend purely because of lack of interest, "cussed laziness", or that most foolish type of selfishness that permits a momentary financial gain derived from "remaining on the job" to blind them to the far greater benefits to be derived from these meetings.

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#### NEWLY ELECTED STATE SOCIETY OFFICERS.

The election of the State Society officers for the ensuing year resulted in the unanimous choice of the following: President, Lucius F. Donohoe; First Vice-President, James S. Green; Second Vice-President, Walt P. Conaway; Third Vice-President, Ephraim R. Mulford; Trustee, George N. J. Somers; Delegate to American Medical Association, full term, Henry B. Costill; Delegate American Medical Association, to fill unexpired term of the late Dr. English, John F. Hagerty. The following officers were unanimously reëlected: Corresponding Secretary, William J. Carrington; Recording Secretary, J. Bennett Morrison; Treasurer, Elias J. Marsh; Chairman of Committee on Program and Arrangements, Martin W. Reddan.

Dr. Donohoe, as First Vice-President, served as Acting-President during the greater part of the past fiscal year and his election now to the office of President is a well deserved tribute to his conduct of the Society's business in the past; he has been actually weighed in the balance and found worthy. The Presidency is an honor usually conferred in recognition of some member's professional standing and without opportunity to determine whether or not he is specially equipped to meet the unusual requirements of the office, but, in this instance, the recipient is doubly honored in the recognition of his professional leadership and in appreciation of excellent service already rendered in a trial occupancy of the office.

The promotion of Drs. Green and Conaway was naturally expected, and in the selection of Dr. Mulford the Nominating Committee would seem to have presented the name of one who, while less well-known throughout the state than the other officers, gives promise of meriting this distinction.

Carrington, Morrison and Marsh were reëlected, of course. Secretaries and Treasurers are much like poets—born, not made. The ability to satisfactorily fill such offices is a gift; training may help to develop one but no amount of training will take the place of such natural talent. So, when a Society secures the assistance of such men as these it would do well to keep them in office as long as possible.

## AMERICAN MEDICAL ASSOCIATION CONVENTION.

The annual convention of the A. M. A. recurred at Atlantic City May 25 to 28 and was again, like all previous meetings at this resort, a record maker in the matter of attendance, registration reaching nearly 5000. Weather conditions were perfect throughout the week and it would be difficult to imagine a more thoroughly satisfactory meeting than the one just held. Much credit is due to the local Committee of Arrangements for the excellent manner in which the convention was cared for. Every feature of the program, scientific and social, was conducted with clock-like precision and, so far as we are aware, there was no occasion for complaint from any quarter. While every member of the Committee did his level best in the preparation for this event and in the performance of duties during the week of the assembly, we are sure that all would agree that special thanks are due to the chairman, Dr. Clarence L. Andrews, for his self-sacrificing labors in the interest of the Association. The Atlantic City members of the A. M. A. did themselves proud as hosts of the occasion.

In the election of Dr. Wendell C. Phillips, of New York, to the presidency, the Association gave this honor for the first time to that large section of the profession specializing in the field of oto-rhino-laryngology and, at the same time, paid a deserved tribute to one who has labored faithfully and well for the advancement of an organized profession. In the New York Academy of Medicine, working in various capacities, as President of the New York State Medical Society, as Delegate from that State to the A. M. A., and as a Trustee of the latter organization for several years, Dr. Phillips has labored earnestly and persistently for the best interests of the medical profession, and this recognition of his services has been well earned. Under the able leadership of President Haggard and President-elect Phillips for the next 2 years the Association is sure to make material progress.

The New Jersey State Society, and the Atlantic County branch in particular, is pleased at the selection of Dr. Philip Marvel as Vice-President of the National Association. This is another instance of an honor appropriately conferred, because as Trustee of the Association for 5 terms, Dr. Marvel rendered most efficient service to the organization. In this new position his counsel and advice will undoubtedly be of great value and it is to be hoped that New Jersey will in due time have the opportunity to propose him for the presidency of the Association.

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## SMALL-POX IN NEW JERSEY.

There is no occasion at the moment to anticipate a serious epidemic of this disease but it would seem wise to prepare for a threatened attack in view of the fact that the disease does exist in the state and has caused a number of deaths during the present year. It is one of the inexplicable characteristics of this dread disease that it occasionally seems to lie dorm-



ant during the summer months and to recur as a serious outbreak on the return of cold weather. Inasmuch as there was a mild epidemic during the recent cold months and a few cases are still being reported even during the summer season, we were led to consider the present situation and the prospect of future developments.

The State Board of Health records show that 122 cases of small-pox were reported in this state between January 1, 1925, and May 1, 1925, with a death list of 39; a mortality of 31.9%, or a death claim of practically 1 patient out of every 3. While the great majority of these cases occurred in Camden and the adjacent portion of Atlantic counties, the northern half of the state was not entirely free; sporadic cases having been reported from Mercer, Middlesex, Ocean, Union, Hudson and Essex counties. During the month of May, 37 new cases were reported in the state, which was slightly more than the average for the preceding 4 months, but in June, up to the tenth day, there were only 7 new cases—indicating an apparent diminution of the epidemic; this deduction, however, may be attributable, as we have already said, to weather conditions and a later increase is not improbable.

The severe character of the disease prevalent with this epidemic is shown in that 20% of all the cases were of the hemorrhagic type and the death rate in this group of 25 cases was 88%.

The only known means of successfully combating small-pox is proper vaccination, and the protective value of this measure is beautifully illustrated in this particular epidemic. Analysis of the 122 cases referred to shows that 79 of these patients had never been successfully vaccinated; that 41 had not been vaccinated or revaccinated within the previous 7 years; and that in only 2 instances did the disease attack persons who had been presumably successfully vaccinated within a period of 7 years. So much for the preventive effect of vaccination. When we come to consider its protective power, it is observed that among the 79 unvaccinated patients the mortality was 64.7%; among those whose protection had been weakened or exhausted by time, the mortality was 33.6%; while in the 2 instances occurring to properly vaccinated persons there was no mortality—both patients recovered. Considering the 39 cases that resulted fatally, with relation to the protective properties of vaccination, it is thus seen that 84.6% of the deaths occurred among the unvaccinated and only 15.4% among those who still retained some protection from vaccination in earlier life.

The moral of this story is not far to seek. Let every unvaccinated person be vaccinated now, and particularly have every unvaccinated child vaccinated before the opening of the next school period; and let every one who has not been revaccinated within the past 7 years seek new or additional protection through immediate revaccination. If this advice be followed properly, the threatened epidemic may be side-tracked or will be promptly stamped out of existence.

## Medical Economics

### ON KEEPING IN TRAINING.

"Look at one of your industrious fellows for a moment, I beseech you. He sows hurry, and reaps indigestion; he puts a vast deal of activity out to interest, and receives a large measure of nervous derangement in return."

*Apology for Idlers.*

There is no duty which, if not actually underrated, is so commonly neglected as the duty of keeping well. Under conditions of reasonable health most men and women admit, in theory at least, that bodily exercise is valuable. The backgrounds of this theory are, first that it is pleasurable; second that it is beneficial; and third that it is necessary; and among a large number of people the gradient of opinion will be expressed on the basis of an arithmetic progression from the third to the first. That is, the least weight of opinion will approve exercise as a necessity, the greatest as pleasure.

For the child, play—for the adult, work—is the commonly practiced idea. And therein lies much fallacy. Americans, with their idolization of "Success" (meaning money) have developed a very wholesome faculty for work. But that development has been exuberant, and the old adage about all work and no play was for long thrown into the discard. Newer generations are changing this point of view, and, fortunately for us, outdoor exercise is now regarded from a better perspective.

Yet there is lack of proportion in its employment. An imbalance is seen in the far greater amount of exercise taken by most devotees of sport during the summer, as compared with the winter months. This is in part because, in the warm months, facilities for exercise are greater, and a larger variety of sport is offered than when it is cold; and in part because the popularity of indoor forms of exercise has not been developed sufficiently. Again a disproportion is seen, even in the open months of the year, in the week-end orgy of play by which seekers after health and pleasure indulge themselves, with a let-down of activity for 5 or 6 days in between the Saturday and Sunday outing. Thus the imbalance is two-fold—yearly and weekly.

To any trainer of athletes such a method of seeking fitness, of developing and maintaining it, would appear nonsensical; and if, on any misguided theory of athletic economy, a trainer endeavored to apply such a system, he would soon be out of a job.

That physical fitness is an essential for the ordinary business or professional man is a truth so plain as to be axiomatic. Yet when one observes the lives of the average clergyman, merchant, physician or banker, there is little logic in the gap between this obvious truth and its want of application. A physician, let us say, is quite willing to take time on a Saturday afternoon or Sunday, between May and November, to drop his practice for outdoor recreation. But from November on to May, or from Monday to Friday in the warm season, if he seek the playground, it is with a bothersome, more or less subconscious, feeling that he is playing truant; and he is all too easily led by the call of work away from what he considers—because forsooth he believes that others are so considering it—a mere pleasure. So, if an effort does happen to be made in this sensible direction, it is all too easily abandoned.

It is this misconception of duty which every physician should think upon and eradicate from his own mind, for it is his high duty to keep physically fit, and so far as may be humanly preventable, to allow nothing to hinder his so doing. To this end exercise is essential, and this exercise must be indulged in with wisdom. Nor can it be held a wise employment of strenuous forms of exercise to practice them only once a week. Some midweek workout is needful to keep one at proper pitch. Keeping in training does not imply just average good physical condition: there is deeper significance in the phrase, something beyond the mere keeping in health, the negative quality of inert freedom from pathologic processes. It conveys alike, the ideas of freedom from hampering disability and readiness for extra stress and strain, ability to meet extraordinary demands on one's strength and vitality.

The first outdoor exercise taken in May or April on the muscular softness induced by a winter's work without physical play, stimulates the circulation, increases nervous and muscular tone, and raises the physical man at once to a higher level. In 2 or 3



days the muscular soreness eases up and the raised tone tends to resume its former level. If a work-out be taken again before this drop is complete, the tone goes still higher than with the first effort, and tends to stay at the upper level a little longer. Constant repetition at reasonable intervals thus trains heart, kidneys, muscles, lungs to do their best work, and maintains them at a high point of efficiency. The patent fault in the habits of professional men is to allow too long a gap between the exercise periods to enable them to profit by a retention of any considerable portion of the tone acquired by the first performance. Too much is lost between one week-end and the next, and the final result is not always beneficial, because of the tendency to overstrain of the cardiovascular apparatus. In some cases the process is undoubtedly more deleterious than beneficial.

In the cold weather there may be tobogganing, skiing, or skating; there is always walking to be had, and a god stiff hour's walk followed by a bath and a rub down before dinner is not to be despised. Indoors—hand ball, squash, boxing, fencing, may be found in the cities, and the Y. M. C. A. gymnasium, with its class work for business men, offers ample opportunity to the strenuously inclined. Setting up exercises in the morning can furnish a fair work-out if taken vigorously enough, and they have an added advantage in that the attendant shaking of the house is a splendid signal for the cook to start the coffee for breakfast.

The great block in the path of this reform is not ignorance, for few will deny the truth of this argument; but habits of thought and misconceptions. Midweek is the time for work, not play, and there is an uneasy feeling of playing hookey when out on the links of a Wednesday afternoon, engendered by contact with the Spirit-of-the-Chase-after-Success of the American business man, too strong for all but the more hardened to resist. That habit can be broken, but to do so a strong sense of duty must be cultivated—duty to one's self, duty to one's family, duty above all things to one's patients—to whom the physician comes all the more radiant of health and a cheerful spirit because he keeps himself in training.

Another difficulty is that much of the time the doctor really has considerable work on hand and is rushed, or thinks he is, and

it is inconvenient to himself, if to no one else, to postpone it. This argument cannot stand, however, in the face of the obvious duty to look after his health, and if he but make this a habit, realizing its importance, not only to himself, but his patients, he will not in the long run so much neglect himself, he will truly less neglect his work, nor will he fall a prey to "extreme busyness", which according to Stevenson, "whether at school or college, kirk or market, is a symptom of deficient vitality".

When medical men as a whole appreciate the truth of this idea sufficiently to put it in practice in their own lives, they may then, from personal knowledge and by precept, preach the doctrine to other brain workers and materially aid in bringing into vogue the very salutary habit of a Wednesday quarter holiday in addition to the Saturday half holiday.

## Death

ROSE, Horace L., of Camden, died Friday, May 22, at his house, 7th and State Streets, after a brief illness.

Graduating from the Jefferson Medical College in 1903, Dr. Rose soon took up the practice of medicine in the city of Camden, and for twenty years he had endeared himself to all who knew him, and was greatly esteemed by his medical associates and much beloved by his family and friends. He was that type of physician who felt that service to others was his calling. It mattered not the hour of the day or night he might be called, he was glad to go. He was careful, thorough, and well informed. No one spoke ill of him. Active in the City Societies and the State Society, and the Philadelphia Medical Club, he yet found time for leadership in Civic enterprises. He was director of the Pyne Point Community Chorus and was a member of Ionic Lodge, and Camp No. 149, P. O. S. of A. Dr. Rose served one term in City Council, being elected on the Republican ticket, and served on a number of important committees. He was instrumental in preventing the placing of a belt line through Pyne Point Park. For many years, he was active in the State Street M. E. Church, being a member of the Board of Trustees. As chairman of the National Cancer Week Committee of the Chamber of Commerce, he arranged for lectures and delivered many himself, on the prevention of cancer.

Funeral services were held at his late residence, Monday, May 25, at 11 a. m.



## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

The extent of recent literature dealing with surgery of the chest indicates a wide-spread, renewed interest in such problems and justifies a brief review of the progress made in that branch of surgery. Unfortunately, the subject is too large to cover fully in a single one of these reviews, and we shall have to limit the present article to a consideration of lung abscess and the surgical treatment of pulmonary tuberculosis.

### LUNG ABSCESS.

According to Carl Hedblom (J. A. M. A., 83:1577, Nov. 15, 1924.) pulmonary infection is a fairly common postoperative complication and the accompanying pathologic changes vary according to the avenue of infection, the amount, distribution and virulence of the infective organism, the resistance of the patient, the length of time the infection has been present, and the treatment.

Abscess in the acute stage following tonsillectomy is typically localized to a circumscribed area of the lung, but may be widely distributed from the onset. In the more chronic stages, purulent bronchitis or bronchiectasis usually develops. In certain cases the infection is undoubtedly embolic, the severe symptoms and wide-spread pulmonary involvement being indicative of such origin. From the standpoint of etiology 2 facts seem definitely established; that the great majority of pulmonary complications following tonsillectomy are due to aspiration infection, and that the great majority of them follow operation under general anesthesia.

Treatment in these cases must be based on the pathologic anatomy of the suppurative process. Expectant treatment is indicated during an associated pneumonia and in the incipient stage of the abscess in all cases. The end of the incipient stage is usually marked by the sudden onset of purulent sputum in large amounts. It is also indicated in all cases in which there is progressive improvement, and in which patients do not become steadily worse during a period of 1-2 months. If the abscesses are multiple and widely distributed, and in cases in which a purulent pneumonic process or pleural thickening make localization uncertain or impossible, there is no alternative but to treat the patient expectantly in the hope that improvement will occur, or that localization will later be possible.

Localized uncomplicated abscesses that do

not show unmistakable signs of improvement after a limited time should be treated surgically. The principles involved in surgical treatment are the promotion of drainage through the bronchus, drainage through the chest wall, and extirpation of the diseased portion of the lung. These results are obtained by pneumothorax collapse, extrapleural thoracoplasty, thoracotomy and lobectomy. Pneumothorax collapse is especially indicated in cases of centrally located abscess. Extrapleural thoracoplasty is suitable chiefly in the chronic cases, especially those in which there is a residual bronchiectasis and in which an associated pleuritis makes localization of the lesion impossible. Thoracotomy drainage is the operation of choice in all cases of solitary abscess not centrally located, and which do not show unmistakable progress toward a spontaneous cure. Extirpation of the diseased portion of the lung is the only possible treatment in the chronic cases in which there is often extensive associated pneumonitis, fibrous thickening of both lungs and pleurae, and bronchiectasis. In such cases treatment by collapse or drainage would be ineffective.

Foreign bodies, especially those of dental origin, as a cause of pulmonary abscess, are considered by E. G. Gill (J. A. M. A., 83:1738, Nov. 29, 1924) who presents an analysis of all the cases of this character that have been published in literature of this and foreign countries. The foreign bodies found, in the order of their occurrence, were teeth, dental burrs, gold crowns, dental plates, fillings, blade of forceps, plaster-of-Paris, hard rubber from dental mouth gags, disks of Allen's dental cement and nerve canal reamers. In the type of foreign-body here discussed, as well as in other types of foreign bodies that enter the lungs, the right bronchus appears to be the favorite site of lodgment. The majority of the 117 cases that form the basis of this article occurred while the patients were under general anesthetic. The most constant symptom was cough, which might be occasional or persistent and accompanied by profuse expectoration. The sojourn of these foreign bodies in the lungs varied from 4 hours to 13 years. Of the 117 patients, 84 recovered. The results were uncertain in 9 and fatal in 24. Lung abscess was the cause of death in 14 cases. Of the 84 cases in which the patients recovered, the foreign body was removed bronchoscopically in 38 instances; it was coughed up in 37 instances; it was removed by lower tracheotomy in 3. One patient was relieved by artificial pneumothorax.

Negelected cases of foreign body in the lung are almost sure to result in lung abscess. If the diagnosis cannot be made by the history, the patient should be x-rayed. If this is not conclusive, bronchoscopy should be performed. Jackson recognizes no absolute contraindications to the latter procedure. In view of the potential dangers which accompany the presence of foreign bodies in the lung, surgeons should exercise extreme care when performing intra-oral operations.

Concerning the medical treatment of lung abscess, Brulé and Hillemand (Bull. et mém. Soc. méd. d. hôp. de Paris, 40:1500, Nov. 13, 1924) present an interesting report of a case treated and cured by the administration of emetin. Five months after an attack of "pul-

monary congestion" a young man was suddenly seized with intense pains on the right side of the chest and fever, followed 36 hours later by vomica of 150 c.c. of thick greenish pus tinged with blood in which magmas of cocci and bacilli but no tubercle bacilli were found. The patient continued to have high fever, and signs of pulmonary abscess became quite definite. In view of the gravity of the symptoms, which were complicated by diarrhea, an artificial pneumothorax was on the point of being induced October 8, when as a last resort 8 cg. emetin hydrochlorate were injected. A few hours later the temperature dropped to 37° C., and although it varied between 37.5° and 38° C. during the next few days, it became absolutely normal after 5 other injections of 6 cg. each. Diarrhea disappeared also in 24 hours and the patient was discharged in good condition November 12. He had no history of any contact with cases of dysentery, and never had had intestinal disorders or hepatic symptoms. Amebas were searched for in vain in the sputum and stools, and rectoscopy showed that the anal mucosa was normal. The truly remarkable effects of emetin as well as the abrupt onset of the disease—which had been noted heretofore in primary amebic abscesses of the lungs—are the only facts pointing to the amebic nature of this case. It should be the rule in cases of pulmonary abscesses of doubtful origin to give a test treatment with emetin immediately, even when there are no reasons to suspect amebiasis.

The surgical treatment of lung abscess is well summarized in a recent article by H. F. Graham (Med. J. & Rec., 121:20, Jan. 7, 1925.) When postural drainage, fresh air, and forced feeding have been employed in the treatment of lung abscess without benefit, the surgeon has the following procedures at his disposal: (1) Bronchoscopic treatment—dilatation of a strictured bronchus or lavage; (2) pneumothorax; (3) drainage of the abscess from the exterior; (4) extrapleural thoracoplasty; and (5) lobectomy by either the original methods or, preferably, by the actual cautery destruction. It is of the utmost value to determine (1) if the abscess is single and well encapsulated; (2) if there is a diffuse area of pulmonary involvement with multiple abscess points like a honeycomb occupying a considerable portion of a lobe; (3) if it is chiefly a bronchiectatic dilatation; (4) if it is centrally located or peripheral; (5) if pleural adhesions are present. Pneumothorax is indicated only in central abscess when operation would be dangerous or impossible. Drainage of the abscess would seem to be the simplest and most logical method of treatment, but the solitary, walled-off abscess is rare. Extrapleural thoracoplasty is used in multiple bronchiectasis. It consists in an extirpation of the bony thoracic wall overlying the involved area of lung. Lobectomy is a radical attempt to remove the affected tissue as in an appendectomy or cholecystectomy.

Cautery pneumectomy for chronic suppuration of the lung is considered in a special article by Evarts A. Graham (Arch. Surg., 10:392-418, Jan., 1925) reporting 20 cases treated, with the following results: Free from symptoms and completely healed, 4, or 20%;

free from symptoms but with remaining bronchial fistulas, 6, or 30%; marked improvement but with some cough still present, 3, or 15%; improved, still in progress, 2, or 10%; not heard from, 1 or 5%; dead, 4, or 20%. Of those patients with remaining fistulas, all are well except for the slight annoyance of wearing a dressing over the opening: in reality, then, 10 patients (50%) may be considered as well. The deaths recorded were all from accidental causes—3 from cerebral complications and 1 from pneumonia in the other lung, none from infection of the mediastinum or pericardium.

#### The Surgical Treatment of Pulmonary Tuberculosis.

Everett E. Watson (Am. Rev. Tuber., 10:20, Sept., 1924) makes an earnest appeal to the tuberculosis specialist to avail himself of modern surgical methods in treating certain selected cases of otherwise hopeless tuberculosis. During the past 10 years he has attempted artificial pneumothorax in 117 cases; with complete or partial success in 79, 20 of these patients having been rehabilitated. In 38 cases no free pleural space could be found, and of these patients 29 have since died and the other 9 are, with one exception, bedridden. There is little doubt that some of these patients might have been restored to health and usefulness by thoracoplasty. Artificial pneumothorax is preferable where it can be performed, because it allows return of function of the diseased lung, but thoracoplasty should be done whenever other means fail to effect collapse; it may be the most simple and logical method where there is extensive lung destruction. Watson insists, however, on careful selection of cases and close cooperation between physician and surgeon.

A general review of the objects to be attained in the surgical treatment of pulmonary tuberculosis is presented by H. M. Davies (Brit. M. J., London, p. 1145, Dec. 20, 1924). The object of artificial pneumothorax is twofold: (1) to rest the lung, and (2) to collapse the lung. The presence of adhesions limiting collapse may not be of serious import in the treatment of those cases in which rest is the desideratum, but may completely ruin the value of the method where collapse is essential. The division of a single bandlike adhesion, clearly defined by the x-rays as a strand running across pneumothorax from the partially collapsed lung to the chest wall, is comparatively easy with a special long, double-edged tenotome passed through an intercostal space, the track having been previously anesthetized with novocain. When the adhesion is not so clearly defined, or is large, or is difficult of access, and particularly when there are multiple bands or membranes, or the condition inside the pleural cavity is somewhat obscure, the thoracoscope will give invaluable aid. The technic is not particularly difficult, though practice is required in locating the adhesion and in manipulating the thoracoscope with one hand and the cautery with the other.

Collapse of the base may be secured by phrenicotomy and evulsion of the phrenic nerve. Two operations have been devised to overcome the disappointments of simple division of the phrenic nerve: (1) Evulsion of



the nerve, exposing it as it courses over the scalenus anticus muscle and attempting by steady traction to draw the whole nerve out from the thorax, and (2) the radical phrenicotomy of Goetze. In the latter operation, the phrenic nerve is divided low down in the neck; the sympathetic fibers running to the inferior cervical ganglion are exposed by gentle traction on the phrenic, and are cut, as is the phrenic, higher up again on the scalenus anticus; the nerve to the subclavius is also divided where it comes off the upper trunk at the upper and anterior border of the brachial plexus.

Apicolysis is the brief term which denotes artificial collapse of the upper part of the lung by mesial displacement of it, together with the parietal pleura, this layer of pleura having been stripped off the inner surface of the chest and the space thus formed being filled up by some foreign body, such as paraffin, fat, fibroids, muscle, etc. By this operation, a fairly efficient collapse of the apex of the lung down to the third rib in the nipple line can be obtained. The indication for apicolysis is the presence of disease mainly localized to the upper lobe, particularly that type of chronic tuberculosis which invades the whole upper lobe and shows little or no tendency to spread beyond, and that type in which there is cavity formation.

Thoracoplasty is the biggest and the most serious of the operations for the treatment of pulmonary tuberculosis; the results, however, are so good that they fully justify the procedure. Briefly, the operation entails the removal of portions of the posterior ends of the first 10-11 ribs through a paravertebral incision. A total of 110-140 cm. of bone is removed. The collapse of the chest wall is surprisingly extensive, but the actual visible deformity of the patient when dressed and padded somewhat in the axilla is almost nil. The results on the symptoms are often startling. Immediate and complete cessation of all cough and expectoration often occurs. Cases suitable for this operation are selected from among those in which pneumothorax has been tried and has failed in toto; or in which the amount of collapse is inefficient and cannot be improved; or from those in which a pneumothorax has been done and the lung has reexpanded with return of symptoms and recrudescence of signs. The greatest consideration must be given to the sound side. Any evidence of activity in this lung is a contra-indication to operation on the other.

The end-results of treatment by artificial pneumothorax are given consideration by Sidney F. Blanchet (*Arch. Surg.*, 10:306, Jan., 1925) who reports his experience during a period of 10 years. Of 2000 cases of pulmonary tuberculosis, 200 were submitted to this form of treatment; more than this 10% of patients in this group should have received the treatment, had they come under observation in time. Half of these 200 cases showed moderately advanced pulmonary tuberculosis and half showed advanced stages of the disease. Of the 100 patients in the second group, 97 are dead and 3 are living; of the 97 that died, really good results followed operation in only 12 cases and even in these the relief was only temporary; it is fair then to say that 15% received some benefit and 85% were not

helped. In the 100 cases of moderately advanced pulmonary tuberculosis, 24 patients are dead; 6 are failing or stationary; 23 decidedly improved; in 18 the disease is arrested; 29 are working. That is, while 30% are dead or failing, 70% shown decided improvement, arrest, or ability to work. In the advanced group the most common causes of failure were the presence of adhesions that prevented any effective compression, and the existence of serious complications. In the more favorable group, failure was generally due to ineffectual compression, but this was true in only 14 cases out of the 100. It is difficult to overestimate the importance of the place that artificial pneumothorax has won for itself.

Carlo Verdina (*Schweiz. med. Wchnschr.*, Basel, 54:956, Oct. 16, 1924) called attention to the fact that the usefulness of therapeutic pneumothorax is frequently impaired by occurrence of pleuritic exudates. Clinical observations in regard to the diuretic action of tuberculins and the stimulating action of ultraviolet rays lead him to consider these measures in combination for the relief of this condition and he reports excellent results.

The indications for thoracoplasty in pulmonary tuberculosis are well given by J. Burns Amberson, Jr., (*Med. J. & Rec.*, 121:32, Jan. 7, 1925). The operation of thoracoplasty now usually employed is the Sauerbruch paravertebral rib resection. The complete procedure includes cutting the first 11 ribs close to their vertebral attachments and removing sections from each rib, 2-4 cm. from the first and increasing to 10 or more cm. from the eleventh. The sectioned ribs are thus permitted to drop and the side of the chest sinks. This half of the chest is reduced by one-half to two-thirds and the lung volume is diminished by 300-500 c.c.; where massive fibrosis has previously developed the collapse may be greater. Because of the incompleteness of the collapse it is sometimes necessary to perform supplementary operations, such as a resection of 1-2 upper ribs anteriorly, or pneumolysis. Section or avulsion of the phrenic nerve on the affected side with subsequent paralysis of the diaphragm is often done as a preliminary to thoracoplasty; the paralyzed diaphragm becomes immobile (except occasionally for passive movement) in a position a little higher than in normal expiration, and this contributes more or less to the collapse and rest of the lung. Thoracoplasty is not employed when artificial pneumothorax suffices to produce the necessary collapse and immobilization. It is always best to defer surgery until one is thoroughly assured that the more diseased lung is not healing and cannot heal naturally and that the lesion in the contralateral lung promises to remain quiescent.

The principal indications for thoracoplasty are furnished by the following 4 groups of cases: (1) Extensive unilateral disease of long standing, in which the patient presents himself for treatment late in the course of his malady. If the total area of cavitation exceeds 4-5 cm. in diameter, in spite of previous contraction of fibrous tissue, it is almost certain that complete healing will never occur naturally. (2) Cases in which a period of rest or sanatorium treatment has accomplished definite benefit, transforming a subacute



or chronic ulcerative and caseous lesion into a fibrocavernous one, but in which symptoms, while less intense, reach a level at which they persist for months or years, and healing is seriously retarded or halted by mechanical barriers (such as large fibrous-walled cavities) which are likely to yield only to lung collapse. (3) Cases in which constitutional symptoms are entirely absent or only intermittently present, but in which, because of the existence of unhealed cavities, there is chronic cough with expectoration. (4) Cases in which the contraction of massive fibrosis has produced such distortion and displacement of the heart and great vessels as to cause disabling circulatory symptoms.

A most satisfactory review of the whole subject of thoracoplasty was presented last year in a paper running through several issues of the American Journal of Medical Sciences, written by John Alexander, and we heartily commend the reading of this full report to everyone interested in the subject; unfortunately, the paper is too extensive to permit of satisfactory condensation into the space at our command. In the concluding paper (Am. J. Med. Sc., 168:574, Oct., 1924) the results are given as collected from a consideration of 1024 cases of advanced tuberculosis treated between 1918 and 1923. There was a mortality of 12% during the first month after operation (the immediate operative mortality was about 2%) and 19% thereafter, mostly from tuberculosis in the originally better lung or other organs. There was improvement in 26%, and 32% were cured. Almost every one of the 1024 cases was desperate, and the disease extensive and severe before operation; almost all had cavity formation and many had bilateral active lesions, although much worse on one side; almost all had been treated in sanatoriums under competent supervision for 1-5 or more years and were unimproved or worse, and in none of them was spontaneous healing to be expected; almost without exception every one was expected surely to die of tuberculosis, because of adhesions. That any appreciable number of such desperately diseased persons could be saved from imminent death is surprising, but that 32% of them were actually cured is almost miraculous. For such cases nothing is known to compare in effectiveness with compression therapy (pneumothorax or surgery), and it deserves the active, aggressive support of every physician and surgeon to whom the tuberculous come for advice.

An operation described by Livio Losio (Policlinico, Pract. Sec., Rome, 32:83, Jan. 19, 1925) as complimentary to artificial pneumothorax or thoracoplasty is that of phrenicotomy, or exeresis of the phrenic nerve. This is done in order to promote healing of the collapsed lung by inducing paralysis of the diaphragm. Such success as has been attained by the aid of phrenicotomy has led to the question whether exclusion of the phrenic nerve as an independent operation could be utilized in the treatment of pulmonary tuberculosis, and T. Landgraf (Beit. z. Klin. d. Tuberk., Berling, 60:81, Nov. 24, 1924) answers with a report of 14 cases in which extraction of the phrenic nerve was performed in connection with extrapleural thoracoplasty; in 12

the results were good; and the same procedure gave good results in 4 out of 6 cases in which pneumothorax could not be performed on account of adhesions and in which thoracoplasty was not indicated because of lack of tendency to contract. In 3 other cases extraction of the nerve was performed as a preliminary for thoracoplasty which, however, was not carried out because of the excellent results from the first operation alone. Of 20 cases in which nerve extraction was performed in bilateral disease, 16 were improved. He therefore recommends phrenicotomy as an independent operation.

## In Lighter Vein

### Wouldn't Scare Him.

"Why didn't you toot your horn if you saw the man in the road ahead?"

"I figured," replied the chauffeur, "that it would be more merciful if he never knew what struck him".—Judge.

### Natural.

"Your hired man is a picturesque chap", remarked the visiting artist. "I wonder if he'd sit for a portrait".

"You couldn't get him to take any other position", declared his employer, who knew his man.—Am. Legion Weekly.

### Housekeeping in London.

Mistress—"Why don't you light the fire?"

Maid—"Because there ain't no coal."

Mistress—"Why didn't you let me know before?"

Maid—"Because we 'ad some before."

—Punch.

### How He Saves His Good Name.

"Does a golfer ever tell the truth?"

"Oh, certainly—he sometimes calls another golfer a liar."—Sidney Bulletin.

### Spelling Made Easy.

Tommy's Sister—"Tommy, what is a synonym?"

Tommy—"A synonym is a word you use when you can't spell the other one."—Answers (London).

### Statistics.

Old Uncle Eben Jones went into a life insurance office and requested a policy.

"Why uncle", said the president, "you are too old for us to take the risk. How old are you?"

"Ninety-seven come next August", said the old man, and added testily, "If you folks will take the trouble to look up your statistics, you'll find that mighty few men die after they're 97."

—London Telegrapher.

**Out of the Final Contest.**—The old gentleman was a trifle bewildered at the elaborate wedding.

"Are you the groom?" he asked a melancholy looking man.

"No, sir," the young man replied. "I was eliminated in the preliminary try-outs."—Quebec (Canada) Daily Telegraph.

## County Society Reports.

### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Society was held on June 9, at the Hackensack Hospital, Dr. Trossbach presiding.

Dr. Bell, reporting for the Committee on Public Health, advocated an expression of approval of the action of the Borough of Bogota in passing an ordinance requiring the vaccination of dogs for the prevention of rabies and fixing a fine for the violation of the law. At the same time that this approval was given, Dr. Adams moved that adoption of a similar ordinance be urged upon every municipality within the county, and his motion was unanimously adopted.

Upon motion of Dr. Hallett, the applications for membership by transfer of Drs. Seeley and Pollen were accepted by the Society.

A letter from Dr. Reik to the reporter, asking what action the Society intended to take in regard to the candidacy for reelection of Assemblyman Chandless, was read and produced considerable discussion. A motion was finally adopted to the effect that the Society go on record as refusing to support this candidate at the poles.

The scientific program followed with an unusually interesting paper by Dr. Joseph F. Montague, entitled "Pruritus of the Perineum". Dr. Montague demonstrated, with moving pictures and lantern slides, the gross and microscopic pathology of the involved areas and his method of treatment. (Complete paper was published in April Journal.)

### BURLINGTON COUNTY.

R. I. Downs, M.D., Reporter.

The stated quarterly meeting of the Burlington County Medical Society took place June 10, at 1 p. m. at Cole's Hotel, Moorestown, with the Vice-President, R. I. Downs, in the chair. There were 27 members and guests present. The minutes of the previous meeting were read and approved. The Chairman extended greetings to several distinguished visitors and invited them to participate in the scientific discussion and in the dinner which followed the meeting.

Dr. Blake, of Mt. Holly, was received into membership upon signing the constitution. An application for membership was received from Dr. Lester Small, of Medford. A letter was read from Franklyn C. Chambers, of the Board of Directors of the Burlington County Hospital, asking that the county medical society be represented in the committee considering building plans for a new hospital. A committee consisting of Drs. Ford, Remer and Longsdorf was appointed to confer with this building committee. On motion of Dr. Newcomb, the Society went on record as desiring the hospital to make provisions for suspicious and emergency tuberculosis cases.

The Society voted that resolutions concerning the death of Dr. F. S. Stroud, of Moorestown, be prepared and a copy sent to the family; a committee being appointed for this purpose and consisting of Drs. Ulmer, Powell and Marcy.

A letter was presented from Dr. Marvel, of Atlantic City, suggesting that the Society instruct its delegates to the State Society to vote for a change in the by-laws that would dispose of permanent delegates and prevent control of the State Society by any small group of counties. Dr. J. Bennett Morrison, being present, explained that he did not believe that there was sufficient evidence of such previous control to warrant such a change in the organization and the Society voted against the suggested action.

Dr. Morrison, Secretary of the State Society, presented a very interesting survey of the successful work of the Society during the last few years, explaining the efforts of the Welfare Committee, especially in regard to legislative matters, the State Society's endorsement of plans for periodic health examinations and for postgraduate medical instruction.

Dr. Henry O. Reik, Editor of the State Journal, announced that he had prepared 2 discourses on the subject of periodic health examinations, 1 for presentation to physicians and the other for laymen, and the Society requested him to present the subject at its October meeting.

Dr. Lucius F. Donohoe, acting President of the State Society, delivered a brief address and expressed his pleasure in observing the work of this county organization.

Dr. Hollinshead, of Gloucester County, was introduced as a visitor from the neighboring county and made a few appropriate remarks.

Dr. Edward R. Hunter, Chairman of the Committee on Pediatrics and Gynecology, then took charge of the meeting and introduced Dr. Marcy, of Riverton, who summarized the histories of 3 interesting cases recently under his observation; 1 case of pneumonia in a young boy and 2 unusual cases of scarlet fever in children, 1 of them being a second attack in the same individual.

Dr. Downs, of Riverside, read a short paper on the "Treatment of Pertussis", which was followed by a general discussion as to the value of intramuscular injection of ether in this disease.

Dr. Almer B. Davis, of Camden, gave a very interesting talk on "Obstetric Emergencies", stressing especially the vomiting of pregnancy, placenta previa, and contracted pelvis, and making a fervent plea for prenatal measurements. For inducing labor, he suggested several doses of pituitrin before administering castor oil and quinin. He also exhibited for inspection a new type of forceps recently devised for the delivery of occiput posterior presentations.

### Camden City Medical Society.

Henry B. Decker, M.D., Secretary.

At a special meeting of the society held May 23, the following resolutions were adopted:

Whereas: The society has learned with profound sorrow of the death of an honored member, Dr. Horace L. Rose, therefore be it

Resolved: That while bowing in submission to this sad providence and gratefully acknowledging this goodness in giving us such a Christian gentleman and physician, we cannot but express our deep sorrow in parting with our deceased brother;



Resolved: That to his bereaved family we tender our heartfelt sympathy, assuring them that we shall ever cherish in our hearts the memories of his earnest and devoted life.

Resolved: That in his faithfulness to the sick and in his conscientious, self-sacrificing devotion to the labors of his profession our brother has left us an example of fidelity to the chains of duty and opportunities for usefulness which commands our unqualified admiration and respect and is worthy of our constant emulation;

Resolved: That to his bereaved family we tender our heartfelt sympathy, assuring them that we shall ever cherish in our hearts the memories of his earnest and devoted life.

Signed,

W. H. Pratt,

W. W. Kain,

A. H. Lippincott.

The regular meeting of the society was held on June 2, the attendance being very small because of the excessive heat.

Dr. Reik spoke on the "Importance of Periodic Health Examinations". He gave one of the most interesting talks we have had the pleasure of listening to, and the Society endorsed the principle of periodic health examinations.

Dr. E. S. Hallinger was elected to membership.

#### SOMERSET COUNTY.

Dan S. Renner, M. D., Reporter.

The regular meeting of the Somerset County Medical Society was held in the Somerville High School Auditorium, June 11, 1925.

The routine business was completed.

Dr. W. H. Whiton, who has retired from active practice and is now living at Neshanic, was elected an associate member of the Society.

The Committee appointed to confer with the local Board of Health relative to the enforcement of the milk ordinance reported that: "The Board of Health had agreed to notify all milk dealers to comply with the ordinance on or before July 1, 1925, and furthermore to notify owners of dairies, and distributors of milk in the Borough of Somerville, that the sale of milk produced from cows which have not successfully passed the tuberculin test will be prohibited after Jan 1, 1926, and that the ordinance adopted by the Board on July 6, 1922, relative to the sale and distribution of milk in the Borough of Somerville, will be strictly enforced after Jan. 1, 1926".

Dr. Samuel B. English, Superintendent of the N. J. State Sanatorium at Glen Gardner, gave a very instructive, illustrated talk on diagnosis of tuberculosis, urging early diagnosis and the protection of children under 14 years of age.

#### Mountain Lake Chemist Leaves \$500 to Hospital.

The will of Otto Herman Krause, a well-known chemist of Mountain Lakes, admitted to probate recently, besides leaving bequests to relatives in Germany and a large number living at Mountain Lakes, bequeaths \$500. to Hackensack Hospital.

## Communications.

### A MEMORABLE MEETING.

(A letter to the Journal, from Edward J. Ill, M.D.)

The writer of this letter was invited by Dr. F. W. Donovan to attend a meeting of the Monmouth County Medical Society to be held on May 20, at his house. He was particularly glad to accept; first, because he wished to renew an old acquaintance with the doctor, whom he had not seen in years and, secondly, he wanted to learn what the speaker of the evening might have to say on a subject as old as civilization but of late rejuvenated with a vigor rarely attained before.

The subject of the readers address was the "Technic of Contraception". The last word does not appear in any of my dictionaries. Of course it means the prevention of conception. The reader of the paper was a fluent talker and was evidently well trained in his missionary work.

He started his address with the old fear of overpopulation—the decrease in the natural resources—coal, wood, oil,—the economic disaster, which large families bring upon the parents,—the desire of the parents for less responsibility and more luxury,—the insistance of wives upon greater freedom of action and chance for more social and welfare (?) work, etc. He strenuously voiced the great increase of a population of low mentality and the refusal of those of high mental attainment to breed.

After this philosophic and social discourse, he promptly started on the technic of the prevention of conception, prefacing his remarks on the experience of a New York Clinic of 16,000 cases. He showed no end of devices to gain such prevention. One of these was to be put in place each time the lady made her toilet for dinner, thus to be in readiness for the event.

It seems to the writer of this, that if he had chosen as his subject, the indication for the prevention of conception and its technic, he would have had a truly practical, ethical and logical subject to deal with. This is distinctly in our domain as physicians and should never be lost sight of. It is difficult to separate the moral from physical well-being of our patients. One often depends on the other. However, the former, in the person of our patients, is none of our affair; the latter distinctly is. It is this latter subject the writer read his essay on when president of the Association of American Gynecologists and Obstetricians. In it, he showed the nefarious results in the young women who practice contraception.

The writer of this was asked to open the discussion and took a sharp stand against an indiscriminate practice, which was ethically and morally wrong. He was particular to emphasize that his religious or nonreligious views had no bearing on his opinion of the subject. He took the stand, however, that the feeble-minded, the epileptic, the chronic insane and chronic criminal should be put in such a condition that impregnation and conception is at least not likely. This is for the



protection of society as a whole, for the protection of posterity and particularly for the good of western civilization. It is not our duty to help people to avoid the duties of life. Where a necessity exists, a consultation with an earnest and ethical physician should precede such advise.

The writer headed this communication to our Journal with the title "A Memorable Meeting". He now wishes to speak of what made the meeting memorable.

It appeared in the discussion that not a single voice upheld the speaker. While all recognized that the speaker was their guest and treated him with the courtesy that becomes such, there was a sharp retort that such an abuse must not be permitted to enter into the daily life of the physician. The writer has never seen a more harmonious and accordant discussion of a truly ethical principle. This meting made him feel that our profession is far from the depths of unethical life, which some would like to have us believe.

The writer carried away with him the conviction that none present wished a reputation as one who dealt in contrivances for contraception and thus have the really nice women of the community avoid his office.

SCARLET FEVER AND THE DICK TEST.  
(Letter to Journal, from C. R. Kay, M. D.,  
Peapack, New Jersey.)

On February 20, 1925, a case of scarlet fever occurred in the Peapack-Gladstone Grammar School from which 8 cases resulted. School was promptly closed for about 3 weeks. After school was in session again for 1 week, 7 more cases resulted. The Dick Test was then applied. Out of a total of 224 children, 187 were tested, giving us 46 positives and 141 negatives, plus 30 who had had scarlet fever and 7 who refused test. Of the 46 positives, 12 were given scarlet fever antitoxin and the other 34, who refused antitoxin, were excluded from school for 1 month, together with the children who had refused the test. This procedure was sufficient to stop the epidemic and no more cases resulted.

Peapack-Gladstone Public School  
Result of Dick Test For Scarlet Fever

April-May, 1925						
	No. Dick Tested	No. Pos.	No. Neg.	No. given Anti-toxin	No. not Tested	No. who had sc. fever
Grade..8	16	2	14	2	0	8
Grade..7	15	3	12	2	1	7
Grade..6	21	3	18	0	0	2
Grade..5	23	3	20	0	0	2
Grade..4	22	6	16	2	1	4
Grade..3	19	4	15	1	1	4
Grade..2	26	10	16	5	1	1
Grade..1	21	7	14	0	0	2
Kgn.....	24	8	16	0	3	0
Totals	187	46	141	12	7	30

School Enrollment = 224; positive, 24.6%; negative, 75.4%. Note:—Of the 30 pupils who had scarlet fever 15 cases were contracted in this epidemic and 15 were contracted at former times.

ZINC STEARATE DUSTING POWDERS  
FOR INFANTS.

(Letter from Wm. C. Woodward, Secretary,  
Committee on Zinc Stearate Dusting Powders.)

The second report of the Committee on Accidents from Zinc Stearate Dusting Powders appointed by the Board of Trustees of the American Medical Association has recently been published. Copies of this report, with an appendix showing the opinions of 34 representative pediatricians on the therapeutic value of such powders, can be obtained on request. Address, Committee on Zinc Stearate Dusting Powders, American Medical Association, 535 North Dearborn Street, Chicago, Illinois, enclosing a self-addressed stamped envelope.

There were reported to the Committee 131 accidents from the inspiration of zinc stearate dusting powders by infants; 28 of the victims died. The Committee conferred with representatives of certain distributors concerning the dangers incident to the use of such powders on infants. Following a meeting held at the headquarters of the American Medical Association, these distributors agreed to coöperate by adopting self-closing containers for the powders they distribute and agreed that cautionary labels are desirable. Opinions were secured from 34 representative pediatricians concerning the therapeutic value of zinc stearate dusting powders; 31 believe that such powders have no advantage over other dusting powders, that they constitute a hazard to infant life, and that their use should be discouraged.

News Items

Miss Katherine Wolfe, daughter of Dr. William J. Wolfe, Chatam, sailed last month to spend the summer in Europe.

Dr. and Mrs. William H. Areson and family, of 153 Bellevue Avenue, Upper Montclair, left last month for their summer home at Lake George. Mrs. Areson's brother, Alfred K. Hallett, who has spent a month with them, sailed for Montevideo, Uruguay, where he expects to spend two years.

Dr. and Mrs. Fletcher F. Carman, of 196 Claremont Avenue, Montclair, left last month for their summer home at Green Pond. Miss Josephine Carman has as her guest, Miss Edith Taylor, of Somerville, Mass.

Dr. Harry Brodskins, of Newark, and Dr. Eva Topkins, of Plainfield, recently spent a Sunday with Dr. and Mrs. Isidore Topkins, of Ambbridge, Pa. Victor Topkins, of Ambbridge, is visiting at the Topkins home in Plainfield.

Dr. and Mrs. Bonnett W. Hoagland and daughter Verna, Woodbridge, have recently returned from a three-months tour of Japan and China. On their journey home they visited the Grand Canyon.

Dr. Henry B. Orton was elected Secretary and Treasurer of the American Bronchoscopic Society, at its Eight Annual Meeting, held in Atlantic City, May 21, 1925.

D. Clarence R. O'Crowley, of Newark, was elected President of the American Urological Association, at its Twenty-third Annual Meeting, held in St. Louis, May 19-23, 1925.

## Announcement

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It has been customary to give notice of the whereabouts of the officers of the State Society during the summer months and we present here the addresses where they may be most promptly reached by any special communication between now and October 1, 1925:

The President, Dr. Lucius F. Donohoe, will be at home throughout July, and mail will be forwarded to him after August 1, if sent to his regular address, 140 West 8th Street, Bayonne, New Jersey.

The Secretary, Dr. J. Bennett Morrison, will be at home during July, and between August 1 and August 21, will be at Everett Chambers, Oak Street, Portland, Maine; after that date he will be in touch with his office, 97 Halsey Street, Newark, N. J.

Communications for the Chairman of the Publication Committee, or for the Editor, should be sent in accordance with instructions at head of editorial page.

It had been hoped that we might present in this issue of the Journal a brief summary of the transactions of the recent Annual Meeting of the Society, but the time has been too short to permit collection of and a satisfactory review of the recorded proceedings. In the desire to be accurate with information concerning such important events, it was determined to postpone publication, and we shall endeavor to give you next month a resumé of the work of the Board of Trustees and House of Delegates; the complete transactions will follow later in the summer, in the form of a special supplement to the Journal.

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## THE VALUE OF RADIUM IN THE TREATMENT OF CARCINOMA OF THE CERVIX.

W. P. GLENDON, M.D., F.A.C.S.,  
Bridgeton, N. J.

The nature of cancer is shrouded in a cloak of mystery and its study leads into invisible regions where we are unable to follow. Notwithstanding the unlimited amount of money and mental effort spent in study and investigation, the cause is still obscure and the end apparently as far away as ever. Malignant neoplasms of the uterus, especially carcinoma of the cervix are deplorably frequent, and so murderously fatal to the victim that the treatment which will improve present methods is certainly worthy of our most serious consideration. According to published statistics, the largest number of cases occur between 40 and 50 years of age, but no age seems to be exempt, and while not frequent, it is seen in women as young as 20 years. We are naturally skeptical of the value of any speculation about the etiology of cancer, when so little is actually known about the disease. That the disease occurs frequently in women who have borne children, and in consequence thereof have sustained inflammatory and traumatic lesions of the cervix, is well known but the force of this observation is weakened by the fact that we often see the disease in spinsters and nulliparous women. It is, however, a popular belief that carcinoma is especially liable to develop in the scar tissue that forms in an old cervical laceration. One theory suggests that epithelial cells become imbedded in the submucous tissue of the cervix, and at the approach of the menopause, when the stroma begins to weaken and lose its power of resistance, the cell inclusion has a chance to run wild. This appears to me a very ingenious theory, but one that does not get us anywhere, because labor is or should be, a normal process, and in the general scheme of creation reproduction is the great function of the sex, and, so long as women discharge this duty to society, I fail to see how they are going to escape the injuries to the re-



productive organs incident thereto. We all know that cancer of the uterus is a very treacherous and insidious condition, and many cases develop with so few symptoms that when the patients come for treatment the evidence of malignancy is so clear and unmistakable that the true nature of the condition is easily recognized.

How far a regular and systematic examination of the pelvic organs of all women past the age of 40 would go to make earlier recognition possible, I am not prepared to say, but I feel that some good might be accomplished by such examinations. The greatest number of women in whom I find cancer seek advice for bleeding or a bloody and offensive discharge from the vagina, therefore, bleeding or a bloody and offensive discharge from the vagina in a woman 40 years of age or over, may be considered as cardinal symptoms and of the greatest value as diagnostic criteria of cancer of the uterus. The bleeding may be profuse, or simply a spotting of the clothing occurring at irregular intervals. Coincidentally with this, or perhaps earlier, there is frequently a watery discharge with a very offensive odor and irritating to the parts. Visual examination of the cervix with the speculum will probably show a swollen, angry looking condition of the parts, with perhaps some ulceration and a marked tendency to bleed at the lightest touch. The edges of the ulcer may be undetermined, giving the sore a very unhealthy appearance. A frequent mistake, and one easily made under such circumstances, is attempting to heal such an ulcer by local treatment; such effort being useless and a waste of valuable time will surely minimize the patient's chance of a cure. In the light of present day knowledge, temporizing with such a serious disease as cancer of the cervix seems criminal. This is the time for energetic measures and if anything of value is to be done for these patients, the gravity of the situation must be recognized and treatment instituted early, for the delay of even a few weeks will sometimes let them pass beyond the time for successful treatment. In the more advanced stage of cancer, the cervix will present the typical cauliflower-like appearance of carcinoma of the cervix, confirming the diagnosis and usually sealing the patient's doom. Digital examination will confirm and convey to the mind the visual appearance. During the early stage of cancer the cervix feels hard and unyielding to the touch, and bleeds from the slightest impact with the examining finger; later when the growth has reached the true cancer stage, the fungous-like character of the mass is readily recognized by the finger. The mass is so soft and friable, that it is easily torn away by the examining finger, emanating a stench that no dead smell can compare with. At this time, the vaginal walls adjacent to the cervix are noticeably hard and the uterus becomes more or less fixed, or it may be so firmly attached to the base of the broad ligaments that the uterus seems moulded in a bed of plaster of paris.

The general health of the patient is surprisingly well preserved up

to this time, unless there has been much loss of blood, when the usual signs of anemia will be evident. Pain is one of the terminal symptoms and unfortunately of little value in enabling us to make an early diagnosis, and usually it does not occur until the case has reached the inoperable stage. The cervix is not a sensitive organ and while the disease is confined to this part of the uterus, the patient suffers very little if any, but when the cancerous process has invaded the parametrium or metastasizes to the regional lymphatics, the patient suffers and as the lesion progresses the suffering becomes excruciating and uncontrollable. Later, the bladder and rectum become involved, with the formation of fistulous openings into the bladder, rectum and vagina, adding to the sufferings of the patient and contributing to the general picture of distress. In the terminal stages cachexia becomes extreme and is rarely equalled by any other form of cancer of the body, making a fit setting for this gruesome disease.

Cancer of the cervix in the early stages, has so few symptoms that the opportunity for making an early diagnosis does not often occur. When the condition has developed sufficiently to give rise to the signs that we look for to aid us in making a diagnosis, namely, hemorrhage or a bloody and offensive discharge from the vagina, its recognition is comparatively easy. A cervix of a woman at or near the menopause, having a hard friable feel, and bleeding easily to the touch, is always an object of suspicion, and if there is any doubt about the true nature of the lesion, I feel that it is for the best interest of the patient to regard such a condition as malignant and treat it accordingly. It is far better to pursue this course, than wait for the classical signs of cancer to appear and while pursuing this policy of "watchful waiting" have the disease become so far advanced that surgery offers slight prospect of cure. A mistaken diagnosis of malignancy is about one of the most fortunate mistakes that we can make and it is certainly one that can do the patient no real harm. Examination of the scrapings from the endometrium, or a section of the suspected tissue from the cervix has never been satisfactory to me, for only too often the report of the pathologist is doubtful and inconclusive. The time for effective action is during the pre-cancerous stage, for I honestly believe that very few cases of cancer of the uterus are ever cured.

The same thing holds true with regard to cancer of the breast. The duration of life from cancer of the cervix, from the onset of the first symptoms, is from 1 to 3 years, but palliative operations will relieve symptoms and the life of some patients may be surprisingly prolonged, even in the most desperate type of cases. The prospects for a surgical cure are good, providing the lesion is recognized early enough to enable the operator to eradicate every vestige of the disease, but, herein lies the difficulty, for as I have mentioned previously and wish to emphasize again, many of the early signs are not noticed or pass un-

heeded, and when something of sufficient importance does occur to cause the patient to consult a physician the disease is often so far advanced that the time for successful operation has passed. While these views may be at variance with those expressed by some authorities, they are the deductions of my own experience and observation, and it is the results that accrue from our own labors that most intimately concern us. No known method of treatment for cancer in use today can be regarded as satisfactory, and one has to be endowed with a large measure of optimism to see anything hopeful in the outlook for the future. The best available statistics give a percentage of 30% cured after the 5 year period following panhysterectomy, with an operative mortality of 11% to 15%. It is needless to add that such results are secured only under the most favorable conditions.

Since June, 1924, I have been using radium in the treatment of uterine cancer with very gratifying results. I have treated all types of cases, early and late, many of them considered inoperable, and in every case I have seen marked improvement follow the application. The local effect of radium on cancer of the cervix is truly remarkable; the fetid discharge stops, the bleeding becomes arrested, the tumor masses and nodules rapidly melt away and disappear, the general health improves and, unless the patient is in the terminal stages of the disease, there is every evidence of cure. The application of radium carries with it no bloody and shocking operation to the patient, and therefore no mortality. Only a brief stay in the hospital is necessary, and very little pain or suffering follows the treatment. These advantages are quickly appreciated by patients and they are willing to have something done quickly and not waste valuable time in the contemplation of a dangerous surgical operation. I have clearly in mind the experience I had with one case of cancer of the cervix, and the amazing result that followed the use of radium aroused my interest in the subject and led me to further investigation of this agent and the determination to try it out in my work. A patient was referred to me by another physician and after examination I diagnosed her condition as carcinoma of the cervix. The disease was so far advanced that operation could not be considered and my feeling was that the patient would not live 6 months. She was sent to a metropolitan hospital, where the findings were confirmed and the condition being unsuitable for operation, the use of radium was suggested and the treatment given. I heard nothing further from this patient for over 2 years, when during the Fall, while gripe was prevalent, I was sent for in consultation. The examination led to the conclusion that she had a bronchopneumonia of gripe origin. I was very much surprised to find this patient living, knowing her condition of 2 years before. I asked the privilege of making a pelvic examination, and greatly to my surprise I was utterly unable to detect any local evidence of her former trouble. I was inclined to doubt the



evidence of my own senses, and I would certainly have been skeptical about the truth of the matter if I had seen it in print. We debated about the possibility of the lung condition being a metastasis, but of this there was no positive evidence. Even if the disease did recur elsewhere, this patient enjoyed 2 years of life, free from any evidence of her complaint, and any remedy that will give such results as this in a disease so fatal as carcinoma of the cervix is certainly entitled to our most serious consideration. If our exertions in the cause of humanity will provide some remedy that will lend new vigor in the hour of sickness and distress, many a hapless and stricken victim of cancer who would otherwise reap nothing but suffering and despair, will bear, in this altered condition, higher testimony to the value of our labors than the most lavish praise from lip or pen could ever afford.

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### **CASE REPORT OF CHONDROMA OF THE HUMERUS NECESSITATING INTERSCAPULO- THORACIC AMPUTATION.**

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WILLIAM SPICKERS, M.D., F.A.C.S.,  
Attending Surgeon Barnert Memorial Hospital,  
Paterson, N. J.

The patient is a man 51 years of age, a Pole, whose occupation is that of a mill worker. In 1919 he was pushing a hand truck and struck his right shoulder violently against a wooden pillar. This injury caused him some temporary pain and swelling of the shoulder joint. He noticed later that the shoulder had not returned to its normal size, although he was free from pain for many months. The shoulder and upper end of the humerus gradually increased in size and he began to experience return of pain at the shoulder, in the region of the axilla, and radiating toward the hand. In 1920 he presented himself at a neighboring hospital, his chief complaint being then enlargement of the shoulder joint, which limited adduction and abduction of his arm; he was unable to work because of this limited motion and pain. A section was taken for examination and the pathologic report was osteochondroma. The patient, however, refused operation.

I first saw this man in August, 1920, at the Barnert Hospital. He complained of swelling of right shoulder and inability to work because of limited motion and pain. He was well nourished. There was a swelling of the right shoulder, which was hard and irregular in shape, extending from surgical neck of the humerus upward to head of bone and into axilla (see photo 1 and roentgenogram 1). The mass was about

the size of a large orange and caused the pectoral muscle to bulge. There was marked limitation of motion but no fixation of the shoulder, the joint itself not being involved and the motion being limited only by the

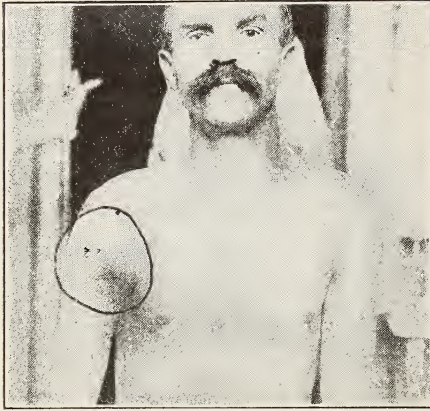


Photo 1.—Shows size of tumor in 1920 when patient was first seen.

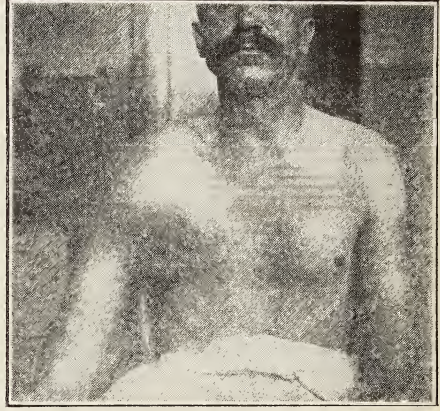


Photo 2.—Shows size of tumor in 1925 before operation.

presence of the tumor. Provisional diagnosis of osteochondroma was made and excision of the upper end of the humerus was recommended, but the patient refused operation. Radium was then applied in 2 brass capsules, 37.5 mg. each, placed on blocks 1.5 cm. thick. The arm was marked off in squares and several applications of 24 hours' duration were made. This treatment was given over a period of 4 months, but without improvement.

Patient disappeared and did not return for further advice or treatment until July, 1924. He then returned because he was suffering more pain, the tumor was increasing in size, and he had also developed several large blebs on the little and ring fingers. The tumor had nearly doubled its size in the 4 years' interval. Motion was more limited and he showed evidence of ulnar involvement, such as weakness and atrophy of the interosseous muscles and the hypothenar eminence. Trophic disturbance existed in the form of large blebs on the hand. He again refused surgical treatment.

On March 24, 1925, he again returned for advice and treatment. At this time, the tumor had grown to the size of a man's head (see photo 2). The arm was practically useless and he was suffering severe pain. The joint was fixed and any motion of the arm caused the scapula to move with it; there was, apparently, firm fixation. Dr. Jacob Roemer, roentgenologist, made the following report:

"Head and neck of the humerus present a slightly porous condition. There are several small exostoses projecting from the periosteum of the neck. There is a shadow of a large tumor mass involving the entire shoulder girdle about the size of a small adult head. Within this tumor mass are seen many small areas of bone production. Conclusion: osteochondroma."

He was again advised to have an operation, and it was explained



that it would now be necessary to remove the arm, scapula and three-quarters of the clavicle. To this he readily consented because of the extreme pain he was suffering.

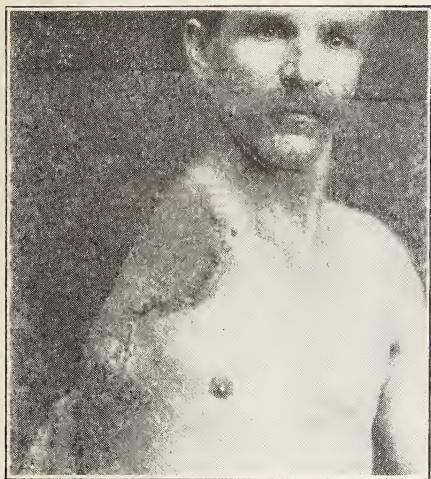


Photo 3.—Taken 2 weeks after operation. (Stains on skin due to Picric Acid.)

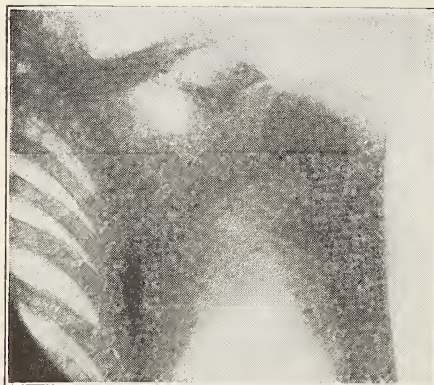


Photo 4.—Longitudinal section through head and shaft of humerus. Upper left section shows tumor breaking through cortex of head; lower right shows infiltration of medulla with tumor. (Sections of shaft taken for microscopic examination; no spontaneous fractures.)

On March 31, 1925, under general anesthesia, Berger's, (devised in 1887), interscapulo-thoracic amputation was performed. An incision from sternal end of clavicle to the acromion process was made, carried through the periosteum along the entire length of the clavicle, and the periosteum was denuded from the bone. At the junction of the middle and mesial third, a Gigli saw was introduced under the clavicle and this bone sawed through. The outer, or longer, clavicular fragment was pulled well outward by a strong bone-hook. The subclavius muscle was cut through and the subclavian vessels and brachial plexus exposed. The transversus colli and suprascapular vessels were ligated near the outer border of the scalenus anticus. Incision was continued from the middle of the clavicular incision outward toward the coracoid process and onward across the anterior axillary line to the upper part of the axilla. The pectoralis major was cut through and the pectoralis minor severed at its insertion to the coracoid process. The cords of the brachial plexus were clearly defined, injected with novocain (1%) and severed with a sharp scalpel at the level of the clavicle. With the arm well abducted, the subclavian artery was next tied with double ligatures of heavy silk and severed. The arm was elevated to allow some of the blood to return through the vein. The subclavian vein was then tied with double ligatures of silk and severed, and the incision was continued from axilla to external border of scapula. Dissection was carried on



close to thorax, and the latissimus dorsi cut near its insertion on the humerus. The arm was then drawn across the body, exposing the back, and from the acromial end of clavicular incision, a cut was carried down



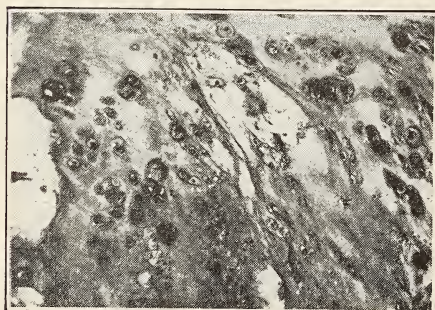
Roentgenogram 1.—Taken in 1920; Exostosis of neck of humerus; few foci of calcification in tumor.



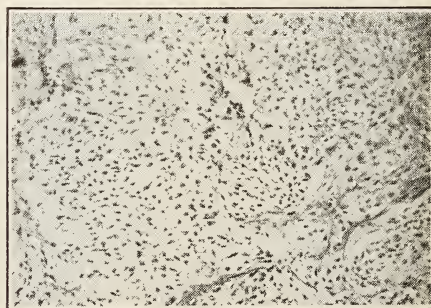
Roentgenogram 2.—Taken 1925, shows involvement of cortex and medulla.

the middle of scapula to the angle to join the anterior incision. Skin and fascia were dissected off posterior surface of scapula to inner border. Trapezius was cut from the spine, and scapula levator, rhomboids and serratus were cut away. Axillary lymph nodes were not enlarged. Arm and scapula were removed intact. A separate stab wound was made in the back for drainage tube. Hemostasis of small vessels was effected and skin wound closed with silk and silworm-gut.

There was almost no hemorrhage, thanks to the preliminary ligation of the transversus colli and suprascapular vessels; this somewhat prolongs the operation but it saves blood and renders the operation safer and easier. There was very little shock and pulse after operation was



Microphoto 1.—Chondroma.



Microphoto 2.—Myxomatous part of tumor with stellate-cells.

of good quality. He was out of bed on the fourth day and was greatly relieved of pain. The wound healed kindly; drain removed on third day and small iodoform gauze wick left in for 2 more days. All sutures removed on seventh day. Patient was up and about ward on sixth day

and was able to be presented to the Passaic County Medical Society on the ninth day after operation. (Photo 3).

The following pathologic report is made by Hans Wassing, M.D., Pathologist, Barnert Memorial Hospital:

Surg. Path. No. 1449.

The upper half of the right arm and the shoulder are changed into a hard, elastic tumor the size of a man's head. The skin over the tumor is freely movable. On exposure the tumor mass is bulky and lobulated, encapsulated by a fibrous tissue, showing whitish-opalescent appearance. The dense bulky masses of the tumor surround all the upper part of the humerus, the humeroscapular joint and the bordering parts of the scapula and clavicle, being densely plastered to these organs.

On section, the tumor exhibits solid cartilaginous parts and many softened strands of more gelatinous structure; besides several smaller and larger cysts, filled with mucinous, serous and fatty material. Irregular bands of fibrous connective tissue, as well as the tendons of the arm muscles, pass through the tumor, the mentioned bands carrying the nerves of the brachial plexus and the blood-vessels of the arm, which are more or less dislocated but not infiltrated or destroyed by the tumor. (Photo 4). The cartilage of the head of the humerus is smooth and of normal appearance, but the bordering part of the shaft shows rough surface with irregular calcification, spicules and layers of bone projecting from the periosteum into the tumor. On section, the spongy substance of the head of the humerus is densely infiltrated by the tumor mass and here in the region of the epiphyseal line the intra-epiphyseal growth passes without sharp borderline into the tumor tissue, surrounding the head of the humerus. Immediately below the epiphysis, the medullary cavity is completely filled out by the tumor mass, which only slightly distends the cavity; the rarefaction of the compact bone of the shaft is not marked and partially there is even thickening of the shaft through the secondary bone-formation in the periosteum, described above.

Microscopically, areas were found composed of hyaline cartilage; the tumor cells show generally capsules and are rather uniform in size and shape; occasionally, however, very large cells with large, deeply stained nuclei can be found; (see microphoto No. 1), mitotic figures are absent and there is no actual polymorphism found in any of the examined pieces. In some areas the tumor cells assume star-like forms (see microphoto No. 2), and the ground-substance is fibrillar. Few areas show more or less deeper bluish-stained ground substance in which no cells can be recognized. Pathologic diagnosis: Chondroma (cysticum, myxomatodes).

There are a few problems brought about by this specimen, which I would like to discuss briefly:

(1.) The patient gives a history of injury, which he believes caused the growth: Ewing states that trauma is frequently reported as preceding chondroma, especially of the long bones (50%).

(2.) The question of malignancy has to be negated; yet experience has taught, that even tumors of absolutely benign structure are liable to invade veins and to cause metastases in the lungs. In our case no invasion of any of the blood-vessels was found, and there are, also, no symptoms suggesting any secondary lung affection.

(3.) An excision of a piece from the tumor was made a few years ago (in another hospital) and the diagnosis of osteochondroma was made. Our cross sections do not reveal any bone formation. The bony thickening of the periosteum has doubtless to be considered as a secondary reactive process; we are therefore unable to explain the findings of real neoplastic bone formation previously reported.

(4.) The question as to the necessity of the amputation of the



scapula and a large part of the clavicle in spite of the integrity of these bones can be readily affirmed; the shelling out of the shoulder joint and of the bordering parts of the scapula and clavicle on the dissecting table was so difficult that the tumor masses had practically to be scraped off from these bones, and there is no doubt that an enucleation or an amputation through the neck of the scapula would have been impossible without leaving small parts of the tumor in the body, which would have produced new growth in a short time.

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### INTERESTING OBSERVATION IN WOOD ALCOHOL POISONING, WITH REPORT OF CASES.

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If one studies the history of the human race from its beginning down to the present time, he is immediately struck by certain outstanding characteristic tendencies which have lived from one era to another and seem as if they were a part of the human make-up. Some of these traits, like the first law of nature, or the law of self preservation, can be easily understood, because of the fact that the supreme position which man occupies above all other animals today, has been attained through eternal strife and combat. These began first by tests of physical endurance in which only the survival of the fittest could live and advance and have continued down to our present rapid civilization, which calls into play every talent one possesses in order to succeed. Coupled with this distinctive and innate quality which makes man stand out alone, however, are several other interesting human attributes which seem to be just as deeply inborn and as much a part of us as the one just described, yet cannot be explained in any way to our satisfaction and will undoubtedly remain as much of a mystery to generations yet unborn as they are to us today. I refer to the great human tendency to want to do that which is generally prohibited or forbidden. Moreover, to look upon things done in secrecy as being the most worth-while things to do.

Perhaps in no other instance has this trait been better shown than in our present illicit liquor problem and liquor drinking, in which individuals, who previous to prohibition days did not care to drink, do so today almost wholly because it is a thing which must be done secretly. Therefore, the victims of alcohol poisoning who are admitted to our hospitals today are not necessarily the chronic alcoholics, who through desperation drink anything regardless of what it is that they can get their hands on, but are likewise the inexperienced unsophisticated young individuals who apparently drink because they think the



beverage is good, as it has been procured through some secret channel. This certainly has seemed to be true with the cases admitted to the Atlantic City Hospital and if one reads the literature covering these problems the same reasoning seems to obtain in many other places as well. I thought it would be of interest to some of you to relate the experience we have met with in the Atlantic City Hospital during our service, as, to me, alcohol poisoning confronts us with one of the most serious economic problems we have to treat in our hospital practice today. This is particularly true, as will be shown later, because of the fact that we are dealing with a poison of such high potency and rapid destruction of tissue, that if it is not neutralized in a very short space of time, it inflicts upon its victim such a profound injury that complete recovery is impossible; moreover, the serious symptoms may not appear in alcoholic poisoning till quite late and therefore not impress the attendant as being of any grave moment.

Methyl, or wood alcohol poisoning can be found in the literature as far back, perhaps, as one cares to read, but occurred mostly in those occupations in which men were subjected to its fumes, like those who worked with paints and varnishes and through absorption by hair tonics or applications to the skin. A few occurred through the drinking of cheap French wines, but not at all as frequently as has occurred in our country during recent years.

The best and most comprehensive monograph published upon the subject is the one given by Dr. S. Lewis Zeigler of Philadelphia, which appeared in the J. A. M. A., October 8, 1921. Zeigler ascribes the great increase in wood alcohol poisoning of recent years, to the restricted sale of grain alcohol since prohibition, which makes it more and more difficult to be obtained, as contrasted with the cheapness of wood alcohol sold everywhere and which can be bought without any restraint whatsoever. Also to the improved methods of wood alcohol refinement which makes it as palatable to drink and as easily substituted in cheap beverages as grain alcohol would be. This he says is unquestionably true because in countries like England where wood alcohol is more expensive than grain alcohol, poisoning through drinking of beverages rarely ever occurs, yet in the manufacture of varnishes alone in 1914 in England, 1,110,000 gallons of wood alcohol were used.

To these reasons for the great preponderance of poisoning by wood alcohol given by Dr. Zeigler, I should like to add that peculiar trait in man, above mentioned, which makes him want to take a chance in all instances in which it must be done in secrecy or is obtained through some illicit channel. This of course does not apply to the ever present chronic alcoholic who through his desperation will drink anything he can get his hands on. These individuals have a moral standard of their own and do things which no law can explain. This was shown in the keeper of an Anatomical Museum, mentioned in Dr.

Zeigler's paper, who reached such a low stage of morale as to allow himself to drink the alcohol from the specimen jars intrusted to his care, notwithstanding the fact that he knew their contents better than anyone else because he had placed the wood alcohol there himself. The inexperienced on the other hand have not acquired the taste and one naturally marvels at the chances they take so early in the game.

### **Chemistry of Wood Alcohol.**

Now, what is the chemical or physiologic effect of wood alcohol on the body and what makes it one of the most deadly of poisons, and one which until very recent years usually proved to be fatal, or at least made its victims blind? Its action can be best shown by comparing or contrasting it with ethyl alcohol or grain alcohol.

Pharmacologists and biochemists tell us that grain alcohol when taken into the body may effect the organism in 3 ways.

(1) By irritation of the gastric mucosa, which causes an increase of gastric juices and dilatation of the small capillaries of the stomach with a consequent increased blood supply when used within moderate or physiologic doses. However, this irritation soon passes away because alcohol is very rapidly absorbed from the stomach and is no longer there to irritate unless repeatedly taken or in larger quantities.

(2) By stimulation of the nervous system, because of its complete and rapid oxidation by the tissues themselves.

(3) As a food, because it has been definitely shown by physiologists to be burnt up in the tissues even more easily than other forms of food; 95 to 98% is quickly taken into the body and oxidized while 5% is excreted by the kidneys and lungs unchanged. After 25 hours no trace of it can be found in the blood and after 15 hours all traces are lost in the body tissues. When taken in conjunction with other foods like carbohydrates and fats, alcohol is oxidized first, thus allowing the carbohydrates to be stored up as glycogen, as well as it spares the fats. Hence the gain in weight seen in most alcoholics. Alcohol itself cannot be stored up in the tissues, but is burnt up by direct oxidation. Therefore, it is a substance which can be utilized by the body economy as food and only produces pathologic changes when taken in repeated or large doses.

Wood alcohol, on the other hand, when taken into the body remains in the stomach a much longer time because only about 40% is oxidized by the tissues. Moreover, it is reëxcreted back into the stomach days after its intake. Therefore, as compared to grain alcohol it is many times more destructive to the gastric mucosa, if considered from that view point alone, because of its prolonged contact with that organ.

Secondly, unlike grain alcohol, it is not burnt up in the tissues, but is oxidized into formaldehyde, formic acid and possibly formicaldehyde; some of the most deadly poisons. Like the bee sting and many insect

bites, these toxic products produce swelling, edema and strangulation of all tissues they come in contact with, because the bee sting and formic acid action are identical.

Thirdly, wood alcohol is in no sense a food and cannot be burnt up or utilized by the body economy in any way. Moreover, it can be found in the tissues as late as 48 hours after its intake. Therefore you see that wood alcohol is much more slowly absorbed from the stomach, is broken down into some of our most potent and deadly poisons, and cannot be used by the body tissues in the form of energy, and acts in no sense as a food.

There is still another great difference between wood and grain alcohol, in that poisoning may occur from wood alcohol in 3 ways; while with grain alcohol we have only the beverage form to consider. First, by inhalation, as before stated, as in painters and varnish workers; secondly, by absorption through the skin as by hair tonics and external application to the skin; and, finally, by mouth intake. However, only the last one, or beverage form, will be considered here.

### **Symptomatology of Wood Alcohol Poisoning.**

The outstanding feature of wood alcohol poisoning, as reported in the literature of the past, seems to have been blindness. This occurred in many instances after very small doses had been taken in highly susceptible individuals; also instances of blindness and even death are reported from the inhaling of the fumes by workers with paint and varnishes. In Dr. Zeigler's series, blindness is the outstanding feature, yet many had gastro-intestinal symptoms, as well, and some showed nervous symptoms simulating encephalitis or pituitary disease. In our cases in the Atlantic City Hospital, gastric, circulatory and encephalo-myelitis symptoms seem to be the outstanding features with practically no eye changes of a distinctive nature. This, we feel, was due perhaps to the rapid and heroic neutralization of the deadly poison, as will be brought out later, before the delicate eye tissues could be attacked. In all these cases, also, marked myocardial, circulatory and renal changes could be clearly made out.

### **Report of Cases.**

M. G. Male, aged 45, saloon-keeper by profession, was first seen complaining of inability to walk or to direct his legs and feet properly. His family and past histories were unimportant and he had enjoyed very good health to date. Notwithstanding his occupation as saloon-keeper he had not been an alcoholic and seldom took a drink. The night before we saw him, he had been in Philadelphia where he took several drinks of whisky with a friend and came home. We were called to see him early the next morning and found him apparently all right except that he could not use his legs except to stand up while he held to the bed. He was not at all intoxicated, and it was not the normal alcoholic effect. On examination these were the outstanding findings: Subnormal



temperature; rapid distant heart sounds, but no increase in cardiac dullness; pulse 120; blood pressure 110-80; upset stomach and vomiting a greenish alcoholic-smelling mixture; and, increased patella reflexes. We immediately began to try to neutralize the poison by alkalization by mouth and kept this up, in spite of his vomiting, throughout the day. In this way, his stomach was well cleaned out and soon this nausea ceased. Within a week his limbs got better, his acidosis decreased, and he soon could walk about with a cane and now he is apparently normal again.

J. L. Male, age 36, occupation laborer, was brought to the hospital by the police patrol in an unconscious condition. He was vomiting profusely and presented a general picture of one in a deep alcoholic state. On examination, he showed the following: Markedly reddened skin all over the body as if in a flush; pin-point pupils; temperature 97.2°; respiration 22, pulse 80; blood pressure 100-80. There were some fine moist râles heard at the base of the lungs. Heart slightly dilated both ways; abdomen stiff and tender. The chief point of interest was the extreme spastic condition of his entire body muscles from his head to his feet. If one attempted to move him he would go into a state of tonic muscular contractions. Gastric lavage with alkalis was immediately instituted and every effort put forth to both rid him of his poison and to neutralize that which was left in the body. Next day he was conscious and his eyes about normal. He could use his hands and feet, but he would immediately go into a state of clonic contractions if asked to do anything. If stood on his feet, he stood on his toes and danced around like an uncontrollable stiff stick. He had also a possible Romberg and would always fall backwards. All symptoms gradually got better and at the end of 10 days he could walk about. In about 2 weeks he could assist about the wards. His arms and hands were the last to clear up. His Wassermann was negative.

J. B. Male, age 37, occupation laborer, was brought to the hospital in a moribund condition. He looked as if he could not possibly live but a few moments. His entire body was a peculiar reddish cyanotic color, respiration about stopped, pulse could not be made out at all and his eyes were rolled upward and outward in a fixed position. By the time he was placed in bed his respiration had stopped and artificial respiration had to be given and an oxygen tube placed in his nose to keep him alive. While one intern gave him artificial respiration, a second washed out his stomach and a tremendous quantity of foul whisky-smelling liquid was removed. He was too moribund to use the stomach tube often, so every possible means was sought to get alkalis into his body as quickly as possible, by bowel, by hypodermoclysis and, as he rallied, by the stomach tube. As soon as he could be examined, these were the physical findings: Eyes showed double external strabismus and pin-point pupils; tongue swollen and mouth frothy; heart markedly

dilated 3 in. to right of midsternal line and 6 to left; heart sounds very feeble; no blood pressure at all in either arm; many moist râles throughout lungs; abdomen stiff and distended; reflexes present and increased. Catheterized urine showed so much albumin that it almost congealed, and there were many granular and hyaline casts. Artificial respiration was kept up intermittently for 6 hours, when he began to rally and by morning was partly conscious. He developed a bronchitis which lasted several days. At points of hypodermoclysis, he developed double abscesses and had to be drained by surgical service, but eventually came around. After 2 weeks' stay in hospital, he got apparently all right again; a faint trace of albumin in urine was all there was left.

I have given as examples, a mild case, a moderate case, and a severe type of alcohol poisoning, which are typical of what one sees and about what is described in the literature except for a somewhat improved prognosis. We had no deaths during our service, due, we feel, to instituting the alkali-eliminative treatment, yet we had several cases that appeared at first to be utterly hopeless.

### **Treatment.**

(1) In that wood alcohol is broken down in the tissues into formic acid and formic aldehyde, it is highly important first of all to try to neutralize its toxic effects before any great harm is done. This we tried to do by using bicarbonate of soda and glucose in any way we could get them into the body;  $\frac{1}{2}\%$  of soda and  $2\frac{1}{2}\%$  of glucose by intravenous method or hypodermoclysis, and 2% by bowel with 5% glucose drop method.

(2) Frequent gastric lavage to remove the alcohol from the stomach, as it is reëxcreted there again from the blood, and leaving soda and glucose behind through the stomach tube.

(3) Heroic heart support by hypodermics, as all these cases have acute myocarditis and dilatation. Caffein sodium benzoate to make the kidneys eliminate the alcohol.

(4) Heat to body to keep up the temperature, as these cases are terribly shocked and abnormal, and watch for any beginning pulmonary congestion in the chest.

### **Conclusions.**

(1) In that wood alcohol is broken down in the tissues into formic drinker as well as in the chronic alcoholic.

(2) Wood alcohol is not burnt up by the tissues as grain alcohol is, but is broken down into formaldehyde, formic acid and possibly formic aldehyde, all of which are deadly poisons.

(3) It attacks the circulatory, the nervous and respiratory systems in a profound way, yet the respiratory system apparently goes first, thus giving one a chance through artificial respiration to keep his patient alive till alkalies can be given.

(4) In that wood alcohol is slowly absorbed and slowly oxidized in the body, we have the feeling that the dose that formerly would certainly have produced death can now, by quick neutralization through alkalies, be overcome and the patient saved.

(5) In that one is dealing with something more profound than a simple acidosis, the addition of glucose makes the result more certain.

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## **MENINGEAL HEMORRHAGES IN THE NEW-BORN AND THEIR CONSEQUENCES.**

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From the very onset of embryonic life up to the period of birth the fetus is exposed to multiple damaging influences, having a direct bearing upon the growth of the central nervous system. Lesions of the latter may be numerous and various with regard to their localization, extent, and depth. They are apt to compromise the cerebral functions not only at the time the damage is done but especially during later development of the nervous system. If the infant survives, infirmities are seen not only in the sensory-motor sphere but also, and particularly, in the mental faculties in which a definite defect is manifest. Among all the multiple factors which are apt to lead to such consequences, only meningeal hemorrhages at birth will be discussed here.

During birth, hemorrhages may occur at different levels; either within the nervous tissue itself or else close to the cranium. In the latter case, the blood may be located between the bone and its periosteum (cephalhematoma) or between the periosteum and the dura, or else beneath the dura. In order to understand the mechanism of formation of hemorrhagic foci, a brief account of the anatomic arrangement of the membranes with their vascular supply is necessary. The dura mater consists of 2 layers, an inner and an outer. The outer, which is the periosteal membrane, sends septa into the cranial cavity accompanied by venous sinuses: the falx cerebri, which encloses the superior and inferior sagittal sinuses, also the straight sinus along the line of junction of the base of the falx with the tentorium; the tentorium cerebelli with the transverse superior petrosal sinuses; the falx cerebelli with the occipital sinus. The septa are in certain places reinforced by aggregations of fibrous ends which enable the head to withstand the great strain in the accouchment. During a difficult labor, the frequent changes in the shape of the head and the excessive tension overstretch the septa, and tears follow.

Tears may be complete or incomplete, unilateral or bilateral. When the tentorium cerebelli is involved, the tear is usually found below its



junction with the falx. When the falx cerebri is damaged, the tear occurs at the level of its middle two-thirds. Holland (Reports on Public Health, Report on the causation of Fetal death, 1922, London) found in a series of 167 cases, tears in tentorium in 48%, and in all of the latter subdural hemorrhages. The fine blood-vessels and the large vein on the border of the small circumference of the tentorium are the sources of hemorrhages. The usual origin of hemorrhage is in the tributaries of the vein of Galen received from the midbrain and from the cerebellar veins entering the straight sinus. The experimental investigations of Holland prove this contention conclusively. These tributary veins are stretched between the fixed point of the Galen vein and the fixed cerebellum. During the excessive tension in difficult labor, the apex of the tentorium is drawn upward and consequently the vein of Galen is twisted at its entrance into the sinus; an enormous distention of this vein and of its tributaries follows. On the other hand, the cerebellum is at that time pressed down into the posterior fossa by the undue pressure of the occipital lobes of the brain. Under such circumstances the veins tributary to the Galen vein, as well as the cerebellar veins entering the straight sinus, rupture.

Over the surface of cerebral hemispheres similar subdural hemorrhages may occur during difficult labor and it is particularly intense in foot-presentation of the fetus. A common form of such an occurrence is between the layers of the falx cerebri, although less frequent than in tentorial cases. Occasionally there may be a hemorrhage at the base of the brain. Rarely does the pia arachnoid tear but in such cases small multiple hematomas occur. Ventricular hemorrhages, although rare, may occur from extreme extension of the fine veins of the choroid plexuses.

The seat of hemorrhage is of importance; in the tentorial cases, for example, even a small blood effusion beneath the tentorium would be of graver consequence than one on its surface however large it might be. Tears in the tentorium cerebelli are the most common in occurrence. The falx cerebri is next in frequency and rather rare, and in the majority of cases was found in association with tears in the tentorium.

In considering the causation of meningeal hemorrhages, it is extremely important to bear in mind the immediate and the predisposing factors. Infections and intoxications in utero may be the direct cause, but the most frequent one is traumatism during the confinement, namely extraction of the head last, forceps delivery from a contracted pelvis, presentation of the face or of the forehead. As to breach delivery, statistics show that tearing of the tentorium was found in about 70-75% of dead fetuses thus delivered. Holland, however, believes, that in such cases the tentorial condition was due to the endeavor of rapid delivery after version, but if breech delivery is properly managed, there should

not be sufficient intracranial tension to produce tearing of the tentorium. The same view can be applied to cases with transverse presentation. Circulatory interference in the umbilical cord and congenital malformations of the central nervous system are also not infrequently the cause of intracranial hemorrhages.

The frequency of meningeal hemorrhages in the newly born may be seen from the statistics of G. Hedren of Stockholm (*J. Am. Med. Ass.*, June 22, 1912) and of Cruickshank (*Lancet* 1923, 1, p. 836). The former examined 700 infant cadavers and found intracranial hemorrhages in about 9.28%. The bleeding was restricted to the meninges in nearly 84%, and cerebral hemorrhage accompanied by meningeal hemorrhage in others, brings the total of meningeal hemorrhages to 90.7%. Delivery had been spontaneous in 50 of the 65 cases, and the conditions in both mother and child seemed to be normal in most of the cases. In the 42 purely meningeal cases, the hemorrhages had been supratentorial in 32, infratentorial in 10, and both in 6, and analysis of these cases leads to the conclusion that intracranial hemorrhages may occur with rapid and easy spontaneous delivery and they may occur without fracture of bone. In Cruickshank's account of 200 cases, one finds the incidence of 65 cases which showed meningeal hemorrhage of a gross character. In 25 cases there were meningeal hemorrhages associated with hemorrhage into viscera.

### Clinical Manifestations.

Meningeal hemorrhage is more frequently suspected than actually determined during life. Death may ensue in a few hours following the meningeal hemorrhage, but if the infant survives, one observes a state of apparent collapse, cyanosis, low temperature, convulsions in subsequent days, circulatory and respiratory disturbances, various palsies and contractures. When the infant further succeeds in overcoming the immediate effect of the bleeding, the above stormy symptoms gradually subside and the child enters into a chronic state of physical and mental inferiority with a crippled central nervous system. Diplegia, hemiplegia, contractures, athetotic or choreiform movements, spastic paraplegia, convulsive phenomena, amaurosis, mental deficiency, or debility of various degrees—are all a symptom-group which could be placed under the one caption of infantile encephalopathies. Of course, this vast group presents various degrees in its extent and intensity. There are mild cases and profoundly damaged cases. From the standpoint of intellectual development, the child may be an idiot or an imbecile or may present only a slight degree of mental arrest of development. It all depends upon the size, localization of the hemorrhage, and upon the facility with which the blood may be absorbed or otherwise removed. The encephalopathies may be early or precociously diffuse, which leads to idiocy; they may be late or delayed, circumscribed and frequently slight, which in adult life will be manifested in but slight disturbances of intelligence. The

arrest of intellectual development will be especially pronounced and less amenable to improvement in those cases which through hereditary factors are inevitably predisposed to and prepared for disturbances or anomalies of cerebration.

A brief physiologic consideration is warranted: At birth the cells of the central nervous system are fully developed. As to the nerve fibers, full growth is present only in those which control reflex movements, circulation, respiration and nutrition; otherwise speaking, the nervous mechanism of the spinal cord and medulla alone are functioning at that period of life. On the other hand, the fibers originating in the frontal rolandic, occipital, parietal, temporal regions of the brain, as well as the projection and commissural fibers, become myelinated only sometime after birth. It is therefore evident that early symptoms will be only those which are in relation to the physiologic function of the medulla and spinal cord but manifestations depending upon the function of various portions of the brain will be in evidence ulteriorly and for the above reasons will remain permanent. If we add to it the compression of the convolutions exercised by the blood, also the possibility of breaking up of the cerebral tissue and infiltration of the latter with the blood, the physiologic damage is then easily conceived.

A brief description of several clinical varieties may be helpful for a full understanding of hemorrhagic possibilities.

### **Cerebral Diplegia.**

Two important subvarieties should be considered. One is the classical Little's disease, in which there is a spastic paraplegia of the upper and lower extremities, in which the spasticity is more pronounced than the paralysis, but in which there are no convulsive phenomena and the intelligence is preserved; improvement is a common occurrence. This form is fundamentally of agenetic order and due to a congenital insufficiency of the pyramidal tract. Premature birth is the original cause. The second variety is due to the destructive lesions of an inflammatory or traumatic origin, of toxi-infectious or obstetrical cause, viz., difficult delivery producing tears in membranous blood-vessels of the brain. Here the motor areas as well as other portions of the cortex are usually involved, thus producing besides spasticity and paralysis also serious convulsive phenomena and disturbance of intelligence. The condition is persistent and remains permanent. The clinical picture of the last form of cerebral diplegia will vary according to the predominance of involvement of different areas. The association of intellectual phenomena with paralysis and spasticity of the limbs indicates a lesion in the frontal and rolandic areas. Here one or the other may predominate, but the presence of epileptiform manifestations is always an unfavorable condition for the intellectual development and in all such cases the mental deficit is much pronounced. Athetotic and choreic movements are also frequently observed in this variety of diplegia. An interesting feature of the in-



tellectual status in the first variety of diplegia deserves special mention. There is a striking discord between the appearance of the little patients and the real state of intelligence. At first glance, the difficult speech and the expression of the face with the mouth open may suggest a low mental state, but an actual test and close observation of their behavior and of their relation to the environment will reveal an integrity of intelligence. The difference consequently between the 2 forms of diplegia is fundamental and its second variety is by far more serious than the first. Since it is due to obstetrical trauma, the value of meningeal hemorrhage in difficult labor cannot be overestimated.

### **Cerebral Hemiplegia.**

Should the hemorrhage be limited to one hemisphere, hemiplegia with all its characteristics will be the result. In almost all such cases intellectual deficit is present and is more or less pronounced; all degrees between ordinary mental arrest and idiocy are observed. The inequality and irregularity in the intellectual deficit is due to the great variation in the extent and intensity of the lesions in one hemisphere. As to the hemiplegia itself, it differs from the same occurrence in an adult in that in addition to the paralysis there is considerable lack of development of the affected limbs; they are small not only with regard to the musculature but also the bony tissue; there are permanent contractions with secondary deformities, hemiathetotic and hemichoreic movements; also, frequently, aphasia is absent in cases of right hemiplegia. Not infrequently, alongside and in place of complete or incomplete intellectual obliteration other spheres of sensory psychic activity are developed, but close analysis will reveal that the latter are only of a purely reflex character, are automatic and lack in associative integration and therefore lose all psychic value.

### **Double Athetosis and Athetoso-Choreic Movements.**

Like in the previous chapter, encephalopathies in infants may be manifested by a more or less marked deficit in the intellectual sphere and accompanied by bilateral motor phenomena in the form of chorea or athetosis. Here again, various degrees of involvement may be present; there are cases with very slight disturbances in the psychic sphere, in which, on the contrary, the motor manifestations are most conspicuous. There are cases in which the 2 conditions are reversed. They are all observed in infants which were born with instrumental deliveries and consequently have sustained trauma, meningeal hemorrhages among them, during birth.

The 3 forms of encephalopathies described are the extreme and gross types. There are many intermediary forms which depend upon the portions of the brain affected by the meningeal hemorrhage. Thus any portion of the rolandic area may be affected; the centers of the leg, arm, or face, lips and tongue may be compressed. There are cases with a minimum of diplegia; cases with pseudobulbar manifestations; cases

with speech defects showing involvement of the speech centers, motor or sensory; cases with exclusive mental defect indicating an involvement of the frontal lobes; cases with persistent and frequent epileptiform convulsions in which particularly the mental development suffers the most. Finally, there may be cases with unilateral or bilateral cerebellar manifestations in which cerebellar manifestations alone are conspicuous.

### **Convulsions.**

It has already been mentioned that the causes of meningeal hemorrhages are principally the tearing of the membrane which is due to its overstretching and leads to rupture of the blood-vessels. To produce a tear means the existence of great cranial stress. As the latter is frequently the result of protracted difficult labor, where the instrumental delivery is practiced, the obstetrician must bear in mind that the force used in forceps application is not to be excessive or not to be applied to the wrong diameter of the head, as for example to the antero-posterior. In the latter case, the vertical elongation of the head is more than anything else apt to cause overstretching and tearing of the meninges. Forceps are useful instruments which in many instances have been responsible for saving lives, but they may also be responsible for injuries leading to consequences which have a great bearing upon the later physical and mental development of the child.

The preventive aspect of the subject under discussion lies in the consideration of all forces that are liable to lead to tearing of the meninges and of the blood-vessels. Wrong presentation and position of the fetus, all other causes of difficult labor, prolapse of umbilical cord, the use of instruments or various manipulations in the delivery of the fetus, are all factors, whose rôle cannot be overestimated in the production of cerebral hemorrhages and of tearing of the meninges.

Besides the preventive phase, let us consider briefly the therapeutic aspect of meningeal hemorrhage. With a certain degree of possible errors, supratentorial hemorrhages generally speaking present a somewhat different clinical picture from the infratentorial type. In the former, the blood spreads over the hemispheres of the cerebrum; in the latter, over the hemispheres of the cerebellum, but also into the medulla. In the former, the blood cannot go beyond the lower surface of the tentorium; in the latter, the blood reaches the subarachnoid space and may extend into the spinal canal. For these reasons, in the supratentorial hemorrhage at birth one finds: a bulging fontanelle and a group of nervous phenomena, such as sleeplessness and great restlessness, and convulsive seizures as the condition persists. In the infratentorial cases, there is considerable depression, apathy, somnolence, early cyanosis, vasomotor and respiratory manifestations and rigidity of the neck muscles. In view of the anatomic differences, respiratory and other bulbar disturbances will not be observed in the supratentorial cases: just as cyanosis is late in appearing and, when it does appear, is not pronounced in the

supratentorial cases; just so the anterior fontanelle is at once bulging and early in appearance in the supratentorial, but it is slowly distending in the infratentorial cases.

For the anatomic reasons just mentioned, in infratentorial cases lumbar puncture may be of considerable benefit. Advocated first by Devraigne (*Thèse de Paris de Dufreix 1905*) it was rapidly followed by others and favorable or very satisfactory results have been reported in the literature. Frequently, the withdrawal of spinal fluid needs to be repeated. In some cases, like in that of Lippman, one puncture may suffice. His patient presented convulsions, cyanosis and rigidity. As the convulsions increased in intensity, Lippman removed 25 c.c. of bloody spinal fluid and complete recovery followed (*New York Med. J. 1916, 103:263*). In Green's case, there were convulsions, cyanosis and apnea. Four punctures were made and 5 c.c. of bloody spinal fluid were removed each time; all the symptoms cleared up (*Boston M. and S. J., 1916, 174:947*). J. M. Brady has recently reported very favorable results from lumbar punctures and removal of some spinal fluid (*J. Am. Med. Ass., 1918, 71:347*). In the supratentorial cases lumbar puncture cannot be of special avail as the blood cannot reach easily the subarachnoid cavity. Surgical therapy is almost the only resource. Early craniotomy is directly indicated. Favorable results from the very nature of the condition can be expected only when an operation is performed very soon (within a few days) after birth. After the clot has already produced damage to the cortical tissue, no relief can be expected. Cushing (*Surgery of the Head*), who obtained 4 complete recoveries in 9 cases, is of the opinion that no hesitation should exist in operating on such young infants in view of the fact that the new-born can withstand cranial operations better than any other surgical operation, and that much less traumatism is created by an operation than by the passage of the head through the pelvis during birth. With proper hemostasis and proper preservation of the body temperature during the operation, the possibility of surgical success, Cushing claims, is secured. In his fatal cases he found extensive extravasation over entire hemispheres; the patients were in a dying condition. Not too much, he counsels, should be attempted at one sitting and a secondary intervention is advisable. Henschen (*Verhandlung Deut. Gesellschaft für Chirurgie, 1912, 41:271*) advises in the supratentorial cases aspiration of the cranial subdural space which should be followed by an incision through the coronal suture. J. M. Brady (*loc. cit.*) suggests in the supratentorial cases to perform first a lumbar puncture and immediately afterward to make an incision below the parietal suture.

It seems logical that in all cases indicating increased intracranial pressure at birth, before a definite localizing diagnosis is made, lumbar puncture should be resorted to at once. Since in the infratentorial group it is of a definite therapeutic value, and in the supratentorial cases the diagnosis may be promptly established.



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## KEEPING FIT.

To every member of the State Medical Society we commend the excellent article in our July issue under the general heading of Medical Economics, and entitled "On Keeping in Training". This happens to be the first of a series of articles to be presented by one of our own members (who prefers, however, to speak anonymously for the present) and who most fittingly opened his new department with a consideration of our own personal economy in respect to health. At this time, when the society is entering upon a campaign for instruction of the public on the advantages of periodic health examinations, it is peculiarly fitting that the advice so freely given to others shall be applied at home. Let every member of the profession take immediate steps to ascertain whether he is in perfect health and, if not, to do what ever is necessary to place his machine in good running order.

In the February Journal, Dr. Bennett presented an interesting account of the mortality records of a large group of New Jersey physicians, considering the age at death, the causes of death, and the duration of life among physicians as compared with the life expectancy tables of life insurance companies. The most striking features of that report were: first, that the average age at death was but a little above 58 years; secondly, that the number of deaths resulting from degenerative diseases was larger than would have been expected among standard lives; thirdly, that there were practically no deaths directly attributable to the character of work performed by the physician—such as exposure to infectious diseases—and that the cardiovascular and renal groups of affections accounted for nearly 50% of all the deaths, which is nearly double the expectancy rate.

The Editor of Northwest Medicine (24:295, June, 1924) calls attention to this same problem, the high percentage of deaths among physicians in the sixth decade of life, and he emphasizes the same points made by Bennett and points out one of the causes of this condition; namely, that most physicians work hard and seldom relax. "Physicians who give so freely of their time serving others, often neglect themselves. Would it not be sound policy for every physician to maintain his own health through relaxation and exercise? Should not every physician reserve for himself not only every Sunday but a half day during the midweek, devoting that time to relaxation and exercises suited to his advancing years? There are few men who cannot afford to give half a day weekly to relaxation and who will not in the end find themselves better off in health, happiness and estate therefrom. Many doctors will say that they cannot afford a half day away from work each week; but failure to take adequate rest may have to be paid for by an early death. The studious, painstaking, industrious worker, who can least be spared, too frequently abuses his powers and shortens his life, to the detriment of himself, his family and the community in which he lives."

Aside from the routine weekly relaxation recommended, every physician should take a proper vacation of long duration during the course of the year, preferably, for most of us, in the Summer season. It is only by such means that one can keep fit for work and competent to render the kind of service he owes to those who employ him. Taking a vacation is, therefore, not alone an investment in health, it is a good business investment.

It is probably immaterial where such vacation period shall be spent; one will choose the seaside, another will desire to visit new lands and seek diversion in new discoveries, and others will prefer the woods for quiet and seclusion or to indulge in mountain climbing. The spell of the green woods was cast upon us as we read the following poem in the New York Times of July 9 and we repeat it for you.

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### **Woods in Summer.**

When Summer marks the city street  
With limping prints of listless feet  
In asphalt; and the flower beds,  
Before her challenge, bow their heads;  
When Summer dries the country way  
And paints the pink wild roses gray  
With dusty pigments, beckoning  
Near by, the woods remember Spring.

The Summer's hot hands cannot break  
The barricade that birches make;  
Her sultry shoulders cannot push  
Past maple clump and alder bush;  
While twining tendrils weave a screen  
Of ferns she may not force between  
To parch the chickadees that sing—  
The restful woods remember Spring.

Green mosses cherish tender rain  
That fell last week, and green vines stain  
Brown carpets olden Autumns left  
'Twixt hemlock root, in boulder cleft;  
Great green frogs glisten, sleek and cool,  
Beside a greenly quiet pool;  
And ruthless Summer cannot bring  
Regret—the woods remember Spring.

JOHN HANLON.

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#### JUSTICE IN RELATION TO LEGISLATION.

Several months ago we presented some editorial comments upon progressive legislation and called attention to the complexities and dangers growing out of the present tendency to treat all evils by the enactment of new laws. The confusion developing from such a multiplicity of laws has occasioned considerable discussion during the past year in our better newspapers and magazines. The American Review of Reviews for July contains a very interesting editorial upon this subject and much that is said therein is applicable to the field of medical as well as to that of general legislation: "The National Industrial Council is now authority for the statement that nearly 11,000 new laws have been enacted this year, 38,844 bills having been introduced in the legislatures of 38 states. The American people are now living under almost innumerable regulations, and it is high time to reduce and simplify them. \* \* \* \* It might be a good thing, for a time, to have legislatures meet in alternate years with the sole purpose of repealing, revising, and simplifying existing laws. At least, well qualified committees of legislators assisted by experts ought to be at work between biennial sessions in making ready to report on revised methods of administering justice, on improved penal codes, or reform of tax laws, and so on. Our mystifying tangle of statutes tends to victimize the ordinary citizen. He cannot possibly know the laws under which



he lives. Neither can he understand the technicalities that prevail in the administration of Justice."

A special committee of the American Bar Association, under the chairmanship of Chief Justice Taft, appointed to consider this situation has reported concerning some of the points most hurtful to our present legal system, and among the 6 most important they include "the lack of uniformity between states in their laws on identic matters".

One could look upon the annual crop of new laws with greater equanimity if it were evident that definite progress was being made toward the attainment of a more wide-spread and even-handed justice but scarcely anyone believes that to be the case. On the contrary, many serious thinkers are expressing the fear that our entire judicial structure is threatened with disaster. The nation governed by the greatest number of laws, we have become the most lawless nation on earth. And as for the honor of providing true justice, equal and alike to all, and with promptness and dispatch, we are certainly far from leadership among the great nations; no one thinks today of comparing us favorably with England or with France. Our one time well founded confidence and pride in our courts of justice have been rudely shattered in recent years by the steadily accumulating evidences of injustice or of failure to dispense justice, and this condition is due at least in part to the great mass of conflicting laws with technical interferences. One hates to confess it but it seems that the very word "justice" is becoming in this country more frequently the subject of joking or of sarcasm than of pride in our legal system.

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### MY SOCIETY.

There appeared in a recent issue of the Journal of the Tennessee State Medical Association an announcement that might be termed a "creed", or "confession of faith" for membership in that organization. As it is quite appropriate for adoption by any similar body, we take the liberty of repeating it here, changing only the name of the association:

"The State Medical Society is my Society. I am one of the 2200 members who partake of its benefits and contribute to its success. No other member has a greater right in the organization than I have—and no less. It is operated by no individual or group—nor for any; but for the common good of all of its members. By holding membership in the Society I have become one of the great army of scientific, ethical physicians which has made mine one of the noblest of the professions. But as it is my privilege to belong, it is my obligation to sustain.

"No man is so great that he can become all-sufficient unto himself. Communion with others is an inherent instinct—and a man is just as strong as his friends. Misunderstanding is often a matter of geography; suspicion, jealousy and hatred rarely exist where propinquity prevails. Friendly intercourse begets understanding and contact with our professional confrères broadens the vision. These are inevitable precursors of wisdom and charity."

## TESTIMONIAL DINNER TO DR. EDWARD J. ILL.

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Royal A. Schaaf, M. D., Newark,  
Reporter.

At the Thirty-seventh Annual Dinner of the Practitioner's Club of Newark, N. J., held at the Newark Athletic Club, Monday, May 4, 1925, the principal feature of the evening was the celebration of the Golden Jubilee of the graduation of Dr. Edward J. Ill. A large number of club members, with their guests, were present to congratulate Doctor Ill, and to wish him many years of further service to the community.

Dr. Elmer G. Wherry, officiating as toastmaster, introduced as the principal speakers Dr. W. S. Washington, Dr. Wells P. Eagle-ton and Senator William H. Harrison. All the speakers paid handsome tribute to the guest of honor; and, in response to insistent demand for a speech, Doctor Ill gave a brief but most interesting sketch of his early years in the practice of medicine, together with word pictures of the leading practitioners of Newark at that time.

The text of Dr. Washington's address is herewith reproduced in full, because of its excellent description of Doctor Ill's personality and accomplishments.

"The dinner tonight includes a testimonial to our honored member, Dr. Edward J. Ill, on the completion of his 50 years in the practice of medicine in this city. I consider it an honor, a privilege and a pleasure to have been asked to express some appreciation of Dr. Ill at this meeting.

"When I came to Newark, 38 years ago, he was the leading gynecologic surgeon in this city. That was an unusual place to reach in so short a time, he having been only 12 years out of college. It shows him to have been a great student with the capacity to take advantage of his studies and correctly apply them to the practical side of his profession. It is no wonder that later his reputation extended over New Jersey and neighboring states until at last, he had gained a national reputation.

"He was a hard worker, but never seemed too tired to lend a helping hand and advice to those of his brethren who asked him. For the 25 or 30 years I was in active general practice, I saw him continuously, both professionally and socially, and I remember how he had to divide his time among all of us who needed his help and how punctual he was in keeping his appointments; he made it a religion, never to waste the time of another physician.

"At the consultation, he brought with him the earnestness and the enthusiasm he always had in the healing art. He was never

faddish. He always examined, carefully, everything new and arrived at his own conclusions. He always stood on his own feet. His conclusions were never arrived at hastily, but only as the result of careful and mature thought. His attitude was never arbitrary nor dictatorial. He was always the professional gentleman, kind, considerate, thoughtful and modest. He never knowingly or willingly placed a brother physician in an embarrassing or humiliating position.

"I think many of those whose memory goes back over that period will recall, with pleasure, the many times he has, by his tact and generosity, relieved us of burdens that seemed very heavy at the time. He had great skill as a surgeon and great intuition in diagnosis. His hands moved at the direction of a cultivated and alert brain. In operating, he was rapid but never made any false or unnecessary moves. It was always a pleasure to watch with what ease he did the most difficult things. He always did just what was needed—nothing more and nothing less—and I have always thought that this was one of the secrets of his successful work.

"At the time he was building a professional reputation by his knowledge and skill, he was also building something equally as precious and lasting, that was his personal reputation which reached into countless homes. His public and private life was unblemished. He not only devoted untold time to hospital work for the poor but took part in public movements that had for their object, the betterment of conditions that affected our community. He had character in its broadest sense. He was honest, truthful and fairminded. He did not traduce his professional brothers, no matter how he might differ from them. Many men who are here can testify to the helpfulness to them that has brought them encouragement to speed them on their way to higher goals.

"Fifty years is a long time to be actively at work in any profession. It has its years of triumph and its years of anxiety and its years of depression. It meets difficulties with courage and hope, and it overcomes them with joy and thankfulness. We congratulate Dr. Ill on reaching this stage of his journey and hope he will have many more years to guide and help us. In 50 years of public and private life lived as it should be, he has reached a position of which anyone might be proud. He has left a heritage to his family which will always be looked back upon with reverence and love. To all of us, his character and work will point the way to something more spiritual and eternal.

"Dr. Ill, you have won and retained our homage, respect and affection."



## Medical Economics

### HOSPITALS—OPEN OR CLOSED

"HOSPITAL, (Med.)—An institution for the reception, care, and medical treatment of the sick or wounded; also the building used for that purpose."—Standard Dictionary.

Shall a hospital professional staff be closed or open? Shall all reputable physicians in a community have access to all the hospital privileges and duties, or shall these be, in part or in whole, the pleasure and responsibility of a chosen few?

This much-mooted question obviously relates to the so-called public hospital which is maintained primarily for the care of free patients, and secondarily may or may not have facilities for pay patients. There is no discussion about the privately owned hospital, erected by a physician, or group of physicians, for his or their sole use. In relation to the public hospital this question admits of no categorical answer, because the permutations and combinations of personalities, of differing degrees of training and ability, of individual prejudices, of likes and dislikes, and all the varied factors making up medical communities the world over, are so numberless as to fix this as a local or community problem wherever the question is raised. However, a few generalizations may safely be made; and foremost among these is a statement of the purpose for which a hospital is intended. It is a place for the care of the sick and injured. It is not designed for the personal gain or aggrandisement of any physician or group of physicians.

The phrase "care and treatment of the sick" has a wider application than its immediate one to the needs of the individual patient. It should embrace as well, the idea of the proper study and investigation of disease, adequate record of illness, training of nurses, compilation of statistics, and all the various activities directed toward *advancing the progress* of the care and treatment of the sick. So, any increased facilities and their intelligent and conscientious employment, for diagnosis, study of pathology, and teaching of students, graduate or undergraduate, may be considered a legitimate part of its function, though this interest should never be allowed to supersede the primary duty of proper care of the patient.

Again, the function of a hospital as thus briefly outlined calls for no small degree of team work on the part of the professional staff, and, in general, the smaller and more compact this body is made, the more harmonious their efforts and better will be their work. While the management of a hospital is vested in the governing board, its professional staff must necessarily share in this function both in an advisory and in an active capacity, and anything cumbersome and unwieldy is to be avoided.

The responsibility of the hospital to the individual patient is a third factor upon which some generalization may be made. The legal responsibility has been passed upon harmoniously by the higher courts of many of the States, and in Brothers' Medical Jurisprudence is stated as follows: "Where due care is used in the selection of its employees, a private charitable hospital, conducted for benevolent and philanthropic purposes, is not responsible to a patient for damages received through the unskillfulness or carelessness of servants, attendants or physicians in charge, even though the patient paid for the services given."

The crux of this statement lies in the phrase "where due care is used in the selection of its employees", and whatever interpretation be placed on the sentence as a whole, there can be little question as to the moral responsibility of the Board of Managers of a hospital which opens its doors for the reception and care of the sick. The medical and surgical staffs may be, indeed are, legally responsible for the professional work they do; but no managing board can avoid the moral responsibility of securing for their guests the best service possible by "due care in the selection" of the members of the professional staff.

As Gaul was divided *en partes très*, so we may be permitted to separate hospitals into 3 groups according to the size of the communities they serve. In the small country town which has only one hospital, and where there may be no more than a dozen physicians, the greatest good may readily come from maintaining an open service. The problem in general is here simplified because the professional men and their capabilities are well known.

On the other hand, a metropolitan hospital, which has an unlimited number of medical men from which to select a staff, a number comprising in its ranks all grades, from the poorest to best, of talent, skill

and ability, could but illy afford to open its doors wide to the entire professional community. The resulting confusion of such a plan—confusion of orders, of requirements, of ideas, the perplexing admixture of personalities—would present difficulties to the management in its therapeutic, training school and didactic functions, well nigh inseparable. Furthermore, the risk of having poor or careless work done within its walls under such conditions is too obvious, and too great to be undertaken by any managing board whose members feel a moral responsibility to the patients who fill their institution. Let it be kept in mind that it is the Board of Managers, or Directors, or whatever their title may be, who, in most institutions at any rate, make the governing rules of the hospital and select the professional staff. In every community of size, physicians, like men in other callings, may be graded as more or less capable; and while opinions may readily vary as to relative merit and rank of professional standing, no one can logically deny the right of a directing board to select the staff from what they consider the best available material.

Hospitals of the intermediate group, in cities having a half hundred or more doctors, have a problem which lies somewhere between these extremes. The chief sin of omission of this group of hospitals is that, not being connected with any medical school or active teaching body, and maintaining closed staffs, they too easily develop a "close corporation" attitude, and forget, or at any rate never develop, one of their important functions, which is to study disease, and by coöperation and team work instruct not only their own staff, but the medical community at large. Much of the same argument for closure applies to these hospitals as to those in large medical centers; but the invidiousness and apparent unfairness of the exclusion from their doors of a large number of the profession in the community, might readily be softened, if not entirely removed, if the staff would recognize 2 things: (1), that it is part of their duty to help in every possible way the outside doctor who sends a case to the hospital; and (2), that the same outside doctor, if they will only allow him, can give them no small amount of help; if he does not, it is their duty to teach him to do so, to make him realize that help is required from him.

The family doctor has access to one of the most important and fertile fields of medical research, as Mackenzie so clearly points out; namely, the study of the beginnings of disease processes. As yet he has by no means realized or grasped his opportunity, and by treating him as the fellow-worker he is, or should be, and not as a rank and culpable outsider, by consulting with him when he sends in a case, by notifying him of operation, necropsy, discharge, etc., he may be helped to a wider field of usefulness in real scientific investigation, as well as led to a more fellow-like feeling toward the group of specialists who make up the hospital professional personnel.

### AWAKENING TO THE TRUTH.

The Rajah of Gwalior, a very, very rich ruler and capitalist of India, had a boil on his neck in Paris, and after the Indian talent that usually attended him had dealt with it for several weeks without improvement, he sent for an English doctor, who came by airplane and advised him to have it lanced. The Rajah thanked him, so the paper says, and paid him a large fee, but said that to lance it would be contrary to the Brahman religion, which respects the human body too much to operate on it, so the Prince went along with his Brahman advisers and shortly died of blood poisoning, leaving behind him his doctors and fortune.

A very instructive case! Lancing a boil is a simple piece of surgery and probably the nearest French surgeon could have relieved the Rajah, but what can you do when the religion you live and rule by disapproves of surgery? Evidently this occurrence is a parable. The world is full of patients with boils on their necks and strong racial, national or denominational prejudices against having them lanced. Consequently there are bad cases of illness, lots of blood poisoning and notable mortality, and bright prospects of more of them, because folks' prejudices prevent their taking proper treatment. Consider the Presbyterians with Bill Bryan on their necks! the Democrats of New York with Hyman on theirs! the Baptists with Straton! Such a state of things cannot long go on.

Life, June 25, 1925.



## Medical Ethics

### SUCCESS.

Success is not always won by the brightest in any walk of life. This is a truism which we see illustrated every day, and while it does not follow that the dull or mediocre are sure to succeed that, nevertheless, frequently happens. When this does occur it is because these individuals have found the kind of work suited to the development of their particular talents. In all lines of work there are certain qualities needed to achieve success and certain rules governing the use or display of these attributes. This is true to a degree in business, but especially so in the professions, and particularly in Medicine, where the methods of obtaining success are limited and different from those of the trades or even of the legal or allied profession of Dentistry. It is proper for a tradesman, having something novel or useful to sell, to acquaint the public with this fact, and shrewd and clever advertising is often an important factor in acquiring business. In literature, art and music, and even the law, the publicity given to the activities of members of these professions serves to acquaint the world with their names and abilities and, since success begets success, such notoriety brings fame and wealth and position.

In Medicine, however, things are different. To the young medical man the traditions and principles of practice must often seem irksome and prohibitive of success, and yet, as in every field of endeavor, there will be found some who stand out above their fellows and, exceptionally, those whose good work carries their reputation beyond their own city and state. What then are the elements of success in Medicine? Two factors are, I think, especially powerful in determining the degree of success that one may attain. First and foremost is knowledge, which implies not only a thorough elementary education and a comprehensive grasp of the rudiments of Medicine, but industry and application in keeping abreast of the times and conversant with the advances and progress in this rapidly expanding field. This is, I think, the chief requisite.

Fortunately for us all, a large number of patients who consult us are suffering from ailments which are self limited, and tend to spontaneous cure and intelligent guidance of the case is all that is required. A smaller number, however, will be found to be suffering from diseases the etiology of which is obscure or the outcome of which is uncertain, and the management of which taxes one's skill to the utmost, and here a knowledge of physiology and pathology helps to a clearer understanding of the morbid process at work and improves our ability to check the progress of the same. Fortunate is the doctor who has been thoroughly grounded in the fundamentals because he not only has a clearer conception of the condition of his patient and the possibility of effecting a cure but, appreciating better the intricacies of the case, he will be led to seek the aid of older or more experienced counsel, and this thought brings me to a consideration of the second element of success, which is not dependent on knowledge or skill or natural advantages of any kind, but is within the grasp of all, namely—*Honesty*.

It may be contended that tact has much to do with success, and especially in Medicine, where the personality of the patient, often changed considerably by his illness, has to be dealt with, and this is doubtless true. It is often as important to know how to act as to know what is wrong, so far as the continuance of the relations of physician and patient goes.

What is success? Not alone the acquisition of wealth, or fame or in medicine, a large practice; or in Surgery a reputation for special skill; but rather, the respect and good will of one's fellow practitioners, and the confidence and esteem of one's patients. Diseases are protean in their manifestations; many of them so obscure as not to be understood by the best informed; surgical ailments are at times so formidable and complicated that the most courageous and clever of surgeons will fail. Many disease processes are so dependent on antecedent illnesses or faults in living that our best efforts to effect a cure will fail of success, and human nature is so ready to excuse its own faults and sins of omission and commission that satisfaction is often sought for failure to secure relief by placing the responsibility on those



who have been doing their utmost to succeed. Perhaps not the least of the troubles one has to contend with is interference on the part of solicitous relatives and friends and unfortunately, too often, on the ready acquiescence on the part of some physicians to criticism of their colleagues or, which is none the less reprehensible, failure to defend their efforts. It is because of these many difficulties that beset the daily life of the busy physician that I am prompted to say—if he has been honest, if he has made an earnest endeavor to arrive at an accurate diagnosis, (and the ability to do this is greater now because of the laboratory and other aids, the use of which must not be neglected) if he has sought counsel when necessary, if he has given guarded prognoses in doubtful cases or been frank in informing those interested when a fatal outcome of the case seemed certain, if he has not by word or look or intimation caused distrust of his fellow practitioner, but has realized his own limitation and the difficulties that encompass all, he will have achieved success in having won the confidence of his patients, the respect and friendship of his colleagues and the consciousness of duty well done.

OBSERVANT.

## Esthetics

### APPRECIATION AND APPLICATION OF ART.

Love of the beautiful is an inherent trait the mere existence of which permits us to enjoy a great deal of pleasure as we pass through life, without any material exertion upon our part, but, like every other natural faculty, its further cultivation will repay any trouble or time spent in developing that power with which we have been endowed. Cultivation of a taste for artistic things should not, however, be conducted with the sole purpose of providing pleasurable sensations; it is equally important, perhaps more so, that pains should be taken to weave these sensations into the warp and woof of daily life, to the end that one not only appreciates the beauty and the skill and the inventive genius that goes into the production of any artistic object but profits by applying to his own work something of what has thus been gained. The

practicing physician is not without need of art in his life and there are many ways in which he may benefit by its study. In the first place, while medicine has primarily to deal with science, there is, nevertheless, art in its practice and the influence of the elements of art upon the development of practice is very decided and quite capable of inducing far-reaching effects. The true enjoyment of art as an esthetic factor is, of course, important both for its cultural effect and for the immediate benefit to be derived from temporary relaxation from the more serious hours of labor.

Recognizing the importance of art in the daily life of every artisan in this industrial community, New Jersey is about to secure an Art Center of a new type, a museum where the individual may find and study artistic collections so arranged that he may consider them with special reference to their applicability to his own working needs. The Director of the Newark Museum has announced that the new building, constructed largely through the munificence of Mr. Louis Bamberger, will be opened in the autumn and that he will endeavor to make it "a museum of service", one that shall act as "a guide, a stimulus and an incentive for people in their occupations as well as in their hobbies". He believes that people should use the museum daily because the desire for art runs through the daily life of everybody: when a woman buys a new ribbon for her hat, that action indicates her craving for art, for something that will uplift and inspire; when a business man changes an old office chair for a new one, he is exhibiting a streak of art; when a physician or surgeon tries to improve the condition and appearance of his patient, to effect the best cosmetic result or to better the technic of an operation, he is showing artistry; each is seeking something better, something that will produce greater satisfaction. Consequently, much inspiration toward the perfection of one's work may be gained through observation of the beautiful in every day life and by the study of masterpieces of genius wrought by those in other fields of labor, whether that field be painting, sculpture, or what not.

Let us, then, whenever the opportunity affords, hie us to galleries and museums for the purpose of inspecting and deliberating upon such artistic objects as have

en collected and brought together for our dectation and utilization. Aside from e galleries, with their larger collections, e may also profit by paying attention to e single specimen or the limited number art objects that may be found in unex-cted places. How many of our mem-ers, even among those residing in the city

Newark, know that the Academy of edicine of Northern New Jersey possesses painting by one of the greatest of all art-ts, Michael Angelo? The Academy has me into the possession of such a valuable ticle and its careful study should be a atter of pleasure and of pride to every ysician who visits this institution.

To those members of the profession who occasionally find themselves in New York ity and with even so little as half an our of time to spare, we would heartily ecommend a visit to the new Art Gallery f Grand Central Station. It is nearly 2 ears since an association of American Art-ts provided for a continuing exhibition n the sixth floor of the railroad station, hat shall present for public view, and for ale, (though no one is asked to buy) the elected best work of living artists, par-icularly painters and sculptors. A visit o this gallery at any time is well worth hile, since the exhibition is constantly hanging through the disposition of some ieeces and the acquisition of others, but rom time to time, special exhibitions are eld; an exhibition of Sargent's work fill-d the gallery at one time last year, and ust recently there has been a remarkable pecial exhibition of oil paintings and wa-er colors by Anders Zorn. Both these asters of their craft have died quite re-ently but both lived to see the realization f their ambitions and to hear themselves roclaimed as truly great artists. The Zorn exhibition has been touring the Uni-ed States, being shown in many of the arger cities, and while it has now left the Grand Central Gallery it would be well to eep the subject in mind and to take ad-vantage of any opportunity that may oc-ur to view it in a neighboring city.

We had seen a few specimens of Zorn's painting and had enjoyed an occasional re-production in the foreign magazines, but

we had no proper conception of the breadth and excellence of his work. Among the 50 or more paintings exhibited, there were none that were commonplace and there were many of a superb character. In por-traiture, there were fine paintings of Grover Cleveland and Andrew Carnegie; of landscapes, a large series of scenes from his home region, Mora, Sweden; among the "nudes" a wonderful picture of 2 girls launching "The Canoe", where the drawing of form, the relative lighting, the coloring and the perspective were all perfect. The anatomist and surgeon could not help feel-ing a thrill over the "Butcher Shop"; never have we seen flesh, bone, fat, and even fascia better portrayed and with such an understanding of the anatomic relation-ships. His water colors were of special in-terest because of their unusual perfection of finish and one of them served to illus-trate another side of his artistic nature. His talent for wood carving was equal to his genius in painting, and this water color of "Grandmother" was set in a broad gilt frame upon the 4 sides of which had been carved and tinted 4 miniatures representing the faces of childhood, girlhood, woman-hood, and, the death's head; a unique and very effective conception.

A gallery of special exhibitions has just been opened at the Brooklyn Museum for the summer months and several groups of painting will be on view there until the first of October. The preliminary an-nouncement promises that one may wan-der through this special exhibition and find at nearly every step something to enjoy. To mention just a few of the particular attractions, they speak of: Designs made by Kenyon Cox to illustrate "The Blessed Damozel" by Rosseti; sketches by Sorolla of his favorite subject, young children run-ning unrestrained on a beach, rushing, laughing, swift, gay, and with hardly a vis-ible body, a disembodied movement of line; a water color by Thomas Eakins—"Whis-tling for Plover", every line and touch of the brush eloquent of thorough, clean-cut knowledge; a group of paintings by Shus-ter, showing the wonders and colors of Southeastern New Mexico.

Take an afternoon off this month and visit Brooklyn; you will be well rewarded.



## RESUMÉ OF PROCEEDINGS

of the

## Annual Meeting

of the

## MEDICAL SOCIETY OF NEW JERSEY

Atlantic City, N. J., June 18-20, 1925

The 159th annual meeting of the New Jersey State Medical Society opened at Haddon Hall, Atlantic City, Thursday, June 18 at 10 a. m., with Dr. Lucius F. Donohoe, Acting-President, in the chair. Prayer was offered by Rev. George W. Yard, of Central Methodist Episcopal Church, following which the audience stood in solemn meditation while Secretary Morrison read the names of those members who had died during the year. The morning session was devoted entirely to the receiving of reports from various officers and committees, and from these reports we cull the following important items:

The Secretary announced the present membership as 2227, which is approximately two-thirds of the total number of physicians practicing in the state, according to the A. M. A. Directory. The attendance at this convention reached a total of 861, of which number 380 were physicians, 24 were Trustees, 136 Permanent Delegates, 62 Annual Delegates, 165 members, 17 visiting physicians from other states, and 357 were ladies accompanying members.

The Program Committee was given vote of thanks for the excellence of both the scientific program and the entertainment arrangements, and all of their plans worked out most satisfactorily.

The Chairman of Publication Committee reported a slight deficit in the Journal publication account, due to increased cost of enlarging and developing that periodical. The present plans of the Journal and the work of the Educational Secretary were further explained by the Editor.

Upon recommendation from the Committee on Honorary Membership, Dr. Edward

J. Ill was unanimously elected an Honorary Member of the Society.

In accordance with a special recommendation from the Board of Trustees, the House of Delegates voted an adequate appropriation for placing a suitable tablet in the Presbyterian Church of New Brunswick, as a memorial to the late Dr. David C. English. The Trustees also advised the appointment of a special committee to search for and collect all past records and property of the Society that might be obtainable and to preserve such things in a suitable place; the committee appointed consisted of the Editor, as Chairman, Dr. Charles D. Bennett and Dr. William G. Schauffler, and it is hoped that every member knowing of the whereabouts of any material of value to the archives of the State Society will communicate with some member of this committee.

The Secretary of the Board of Trustees also read a report from the Special Committee of University Extension Graduate Medical Education, outlining a plan whereby the County Societies may avail themselves of special courses of instruction to be given by teachers from the University of Pennsylvania Medical School, and, Dr. Morrison was authorized to prepare and distribute copies of this plan.

Reporting for Delegates to the American Medical Association, Dr. Eagleton urged readoption of the request for a change in the By-Laws of the national organization, providing for the holding annually of an ad interim session of its House of Delegates, and the Society adopted this resolution and instructed its delegates to work for the establishment of this principle.

The Special Committee which for several years has had in charge a revision of the



Constitution and By-Laws presented a report, through its chairman, Dr. Johnson, and the report was unanimously adopted. (These changes in existing rules of the Society have been previously published.)

At the request of the Budget Committee and with approval of the Trustees, new amendments to the By-Laws were submitted, and adopted, providing for establishment of a new committee on Finance and Budget to be composed of 6 members, of whom 3 shall be selected by the Trustees and 3 be elected by the House of Delegates, and, arranging for closer coöperation between the committee and the Treasurer.

Additional amendments to the Constitution and By-Laws were presented by the Hudson County delegates: The constitutional changes proposed would do away with the Board of Trustees as at present constituted and provide for an elective body, and the change in By-Laws called for abolition of the existing provision whereby the Fellows are represented by 5 members on the Nominating Committee, and chosen by the Trustees. The proposed constitutional amendment had to lay over until next year, and the proposed change of By-Laws was later withdrawn.

It may be well to mention at this point that, at a later meeting of the Trustees 2 resolutions were considered relating to these matters:

(1) "The Trustees recommend that the Fellows, as such shall have but 1 representative on the Nominating Committee and that he shall be the Junior Past-President. This was passed and later adopted by the House of Delegates.

(2) "Reformation of the Board of Trustees should be immediately instituted with the idea of making it a more democratic body, but realizing the value of every member who has served through the chairs to the good of the Society". This second resolution was referred to a special committee of 3 Fellows—Drs. Eagleton, Hunter and Ill—who were instructed to report their conclusions to a subsequent meeting of the Board.

The Committee on Medical Defense and Indemnity Insurance, Dr. Beling, chairman, reported that only 582 members are now subscribing to the Group Insurance plan, the others being still protected by the old plan only, and urged that all members

adopt the new method which provides both defense and indemnification.

Dr. Morrison amplified Dr. Beling's explanation of the policy offered, showing that it possesses all the good points of any other company's policy, together with many additional helpful features, and that it is the safest and cheapest form of insurance obtainable.

A number of questions were then submitted for further consideration by the committee.

Dr. McBride, as Chairman of the Welfare Committee, reported on the work of this body during the past year. The "Doctor's Title" Bill, as you know, failed "because a certain few members of the legislature failed singularly, as I see it, in the performance of their duties, by burying this important measure in committee despite every effort on the part of our Society and of many influential citizens whose only object was the protection of the public in health matters by guaranteeing to the people that the title of 'Doctor' meant that the person using it was qualified by special training to treat the sick. The will of the majority of the legislature, as well as our wish, was thwarted by an unscrupulous act and I think we should go on record at this time in no uncertain terms as being opposed to any repetition of such conduct. We believe that the interests of the people of the state, of the very government itself, is sure to suffer seriously if conduct of this kind is allowed to pass unnoticed or unrebuked".

As to the question of reintroducing this matter at the next session of the legislature, Dr. McBride asked that the Welfare Committee be not bound at this time by positive instructions but be left to exercise its best judgment at that time, and, the delegates concurred in this recommendation. The chairman's further advise that membership of the Welfare Committee be increased to 35 and that every county be represented by at least one member was also adopted.

The scientific program, as has been said, was of a very high order and all of the papers presented, as well as the President's Address and the Orations on Medicine and Surgery, will appear in successive issues of the Journal.

The complete "Transactions" of the annual meeting will be published shortly as a supplement to the August issue.

## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

### ANESTHESIA AND THE ACTION OF ANESTHETICS.

Consideration of anesthesia for a "bad risk" patient is always a perplexing problem, and while every case must be settled by the special conditions presented there are some helpful generalizations. George W. Crile (Brit. J. Anesth., Manchester, 2:105, Jan., 1925) says that the question usually arises as to which presents the greatest danger, interference with the internal respiration by the general anesthetic, the uncertainty of complete control of pain plus the certain emotional strain resulting from the use of the local anesthetic alone, or, the danger from decreased blood pressure in the case of spinal anesthesia. In an attempt to solve this problem, he conducted experimental and clinical studies of the effects of surgical trauma administered under different types of anesthesia. In the light of these laboratory and clinical observations, the problem in the case of the bad risk patient resolves itself into this: How can he be protected against the dangers of the lipid solvent anesthetics, such as ether or chloroform, the suboxidation of nitrous oxide-oxygen anesthesia, the low blood pressure of spinal anesthesia or the psychic trauma which accompanies local or regional anesthesia?

The solution of these problems lies in a combination of different methods of anesthesia whereby the safest stage of each may be used to only that degree required to accomplish its purpose. In bad risk cases spinal anesthesia is contraindicated because of its effect upon the blood pressure, but local or regional anesthesia may be used with safety except for the psychic factor, for control of which a light degree of a general anesthetic is required. The lipid solvent ether, however, must be avoided, as well as danger from suboxidation by full nitrous oxide-oxygen anesthesia. These 2 dangers are met by using nitrous oxide-oxygen only to the stage of analgesia, and minimizing the psychic factor still further by narcotization with morphin, or with bromids in cases in which morphin may be contraindicated. Experiments have shown that in the stage of analgesia, the internal respiration, i. e., the acid-alkali balance of the cells, is not impaired, and that by the use of this combination of analgesia, local anesthesia and narcotics, the bad risk patient may be carried through an operation without any further impairment of the internal respiration. The op-

eration must be short and deft, with minimum trauma, and should be performed in the patient's room without removing him from his bed.

In the same Journal (Brit. J. Anesth., Manchester, 2:112, Jan., 1925) Hans Finsterer discusses the influence of anesthesia on the results of major abdominal operations, in the light of Crile's work which proved that ether as a lipid-dissolving drug exerts a detrimental influence on the brain cells, the liver, heart and suprarenal capsules, and that it more particularly increases the acidosis of the blood which condition represents the cause of shock and subsequent death. He contends that by means of exact conductive anesthesia walls where novocain is injected not only subcutaneously, but also intramuscularly, into the posterior rectus sheath, it is possible to open the peritoneum without any pain at all. If by injecting novocain into the peritoneum from the inside, care is taken that the entire peritoneum is anesthetized, the retractors may be inserted without causing pain and may even be pulled upon. A complete muscular relaxation, which is of great advantage in the operation, may be obtained by the infiltration of the lateral border of the rectus. In order to render painless the operation on the abdominal organs, the nerves running along with the vessels in the mesenteries must be blocked off by injecting novocain solution into the mesenteries. Local anesthesia should be applied in any abdominal operation, since it possesses great advantage over general narcosis. Indications for operation may be considerably increased without at the same time increasing thereby the mortality. In acute intestinal obstruction, lumbar anesthesia should be avoided on account of the dreaded sinking of blood pressure. The results of operation are much improved by the exclusion of deep general narcosis. Fatalities of so-called operative shock occurring within the first 24 hours may be avoided. In a series of 2863 laparotomies without deep narcosis, including 907 stomach resections and 170 intestinal resections, there was no fatality from operative shock.

### THE PERCENTAGE OF ETHER IN BLOOD, MILK, URINE AND THE BREATH DURING SURGICAL NARCOSIS WITH ETHER.

In deep ether narcosis the percentage of ether in the venous blood, as shown by the average of 67 analyses, according to Kal Gramen (Brit. J. Anesth., Manchester, 2:127, Jan., 1925) amounts to 80 gm. per cent. After narcosis has begun the percentage of ether, with the ordinary ether dropping, rises in about 10 minutes to this height, where it then remains while narcosis lasts, with more or less variation, according to the pace of the dropping demand by the operation. After the narcosis ends, the percentage of ether at first sinks very rapidly, then more and more slowly. The length of the period of elimination is as a rule 1-2 days, determined mainly by the length and profundity of the narcosis. An exact determination of the percentage of ether in the urine is coupled with difficulties, but it may be assumed that the same concentration of ether probably occurs in blood and urine. The amount of ether eliminated by the breath is



considerable during the first quarter of an hour after narcosis has ceased. The average of 15 analyses during the first 10 minutes amounted to 27.67 mg., corresponding to 2 drops of ether per liter of air. The percentage of ether in mother's milk was found to be practically the same as in the blood. A few hours after an average length of narcosis the percentage of ether in the milk is so small that in all probability there is no risk for the child in taking the breast. After 4 minutes' superficial narcosis ether was noted in the blood of the fetus. The concentration of ether which, in ordinary superficial narcosis, in spontaneous release or with light forceps passes into the blood of the fetus, is about half that of the mother's. In none of these cases did the fetus appear to be influenced by the narcosis.

#### HEADACHE AND EDEMA AFTER LOCAL ANESTHESIA.

Rud. von Jascke (Klin. Wehnschr., Berlin, 4:65, Jan. 8, 1925) has repeatedly advocated lumbar anesthesia in operative gynecology but admits that headache is of frequent occurrence (23.4%) and sometimes very stubborn, having been known to last as long as 12 days and to defy every remedy. As these headaches often occur in series, he thought it possible that they were due to some variation in the preparation of the drug used but careful investigation proved that even after use of especially prepared chemically pure specimens of tropacocain the headaches continued to appear. Experimenting with solution prepared with normal saline or with pure water it was found that if the preparation be rendered free of salt these headaches occur in only 14% of cases and that the intractable nature of the headache had been completely conquered.

It is a common experience in surgery to have the injection of a local anesthetic followed by some edema of the surrounding tissues. The fact that one surgeon obtained very satisfactory results with saligenin as a local anesthetic without epinephrin, considered in conjunction with the fact that the addition of epinephrin to the local anesthetic is a very general practice in clinical surgery lead Arthur D. Hirschfelder and his associates (J. Pharmacol. & Exper. Ther., 24:453, Jan., 1925) to investigate the rôle of epinephrin in the production of such edemas. The subcutaneous tissue of a rabbit's ear was injected on one side near the median artery with the local anesthetic alone, and the same amount of anesthetic plus adrenalin was injected into the corresponding site on the opposite ear. Within a short time an inflammatory wheal replaced the original wheal of the injection and the diameter of this persistent wheal gave an indication of the inflammatory reaction. From these experiments it appears that both cocain and saligenin have a greater tendency to produce edema in the tissues than procain or butyn, and that in the case of cocain and saligenin the production of edema is greatly enhanced by epinephrin. Since cocain caused primary vasoconstriction, and saligenin and butyn caused vasodilation, while procain had but little effect on the peripheral vessels, it is probable that the edema is produced by direct injury of the tissues and the vascular and capillary walls rather than by vasomotor action.

#### NYSTAGMUS AND OTHER OCULAR MOVEMENTS DURING ANESTHESIA; THE DIAGNOSIS OF POSTOPERATIVE LABYRINTHITIS.

Bárány and Rosenfeld have shown that experimental vestibular nystagmus, as provoked by irrigation of the ear with cold water, remains intact during the lightest degree of anesthesia (and the same applies to coma). As a more profound stage is reached, the rapid phase is abolished with the result that there is a conjugate deviation of the eyes to the side on which the ear is irrigated. As the anesthesia becomes still more complete, the slow phase also is suppressed. During return to consciousness, the same phenomena occur in the inverse order. The conclusion drawn by some observers, that the rapid phase is dependent on a voluntary impulse localized in the cortex, has been disproved by Bauer's and Leidler's experiments on animals, showing that the rapid phase can be produced after ablation of the cortex, and also by clinical observations discussed in previous publications by the author himself. In a recent paper G. V. Borries (Acta Otolaryngol., Stockholm, 7:187, No. 2, 1925) concerns himself with phenomena observed in person with a sound vestibular apparatus, and in the first place with spontaneous nystagmus during anesthesia.

This nystagmus occurs while the patient is still able to make voluntary movements with the eyes, and assumes the direction in which the eyes are looking, no matter whether horizontal or vertical, oblique or diagonal, but is always absolutely rectilinear without the slightest rotatory component, so that it is easily differentiated from spontaneous labyrinthine nystagmus and also from the physiologic nystagmus in extreme abduction (the "Endstellung-synstagma" of German authors). It is again observed during the patient's return to consciousness, and is therefore of interest to the anesthetist. But it also assumes great importance for the clinician on the strength of the fact that an entirely analogous nystagmus occurs within 24 hours and sometimes as late as 49 hours after ether anesthesia administered for operations which have nothing to do with the ear. If this nystagmus is not carefully differentiated—especially by its rectilinear character and by the fact that it can assume an upward vertical direction, if the eyes look that way—it might lead to an erroneous diagnosis of postoperative labyrinthitis. Borries regards it of an asthenic nature: owing to diminished power of fixation in the position of abduction, a contest ensues between lateral fixation and the tendency of the eye to return to its primary position (Kestenbaum's "Entspannungstendenz").

Bárány and Flesch have described the slow movement of the eyeball from one side to the other which occurs as the anesthesia becomes more complete. These movements, sometimes associated with minimal vertical oscillations, are in some cases unilateral, and fairly frequently incoördinated, so as to produce divergence of the eyes. Sometimes, the nystagmus described above is still present when they make their appearance, and they outlast the corneal reflex during the progress of the anesthesia—a feature which makes them very useful to the anesthetist.



### BLOOD PRESSURE GUIDES AND SAFEGUARDS IN ANESTHESIA.

John H. Evans (Anesthesia & Analgesia, 4:148, June, 1925) considers the study and proper interpretation of blood pressures and their relation to the pulse rate as one of the foremost factors in protecting the patient. If the rule established by McKesson, based upon the study of more than 8000 cases, is true, one cannot but be impressed with the necessity for taking blood pressures and pulse rate during operation. He says: "A typical case of shock is characterized by a systolic pressure of 80 mm. Hg. and progressively less, a pulse pressure of 20 mm. or less, and a pulse rate of 100 and ascending; and that after half an hour of sustained low pressure and rapid pulse has been passed, almost every patient succumbs either shortly or within 3 days of surgical shock or heart exhaustion". C. W. Moots, of Toledo, has formulated an *Index of operability* based upon the relation of the pulse pressure to the diastolic pressure. "If the pressure ratio is high or low there is reason to apprehend danger; if the pressure ratio lies between 25% and 75%, the case is probably operable; if outside these limits it is probably inoperable." Barach has applied the term "energy index" to the amount of energy expended by the cardiovascular system in a minute. For convenience, the energy index is arrived at by multiplying the sum of the diastolic and systolic pressures by the pulse rate. Grover, from an experience of 25 years in the study of blood pressures, states that "the maximum energy consistent with safety to the vascular system is 20,000 mm. Hg.; the normal range is from 13,000 to 20,000. When less than 13,000, general cardiovascular weakness is suggested; when above 20,000, an excessive circulatory load is being carried."

### ETHYLENE ANESTHESIA.

Much has been written recently and considerable interest aroused everywhere concerning this comparatively new anesthetic. It has been administered in a variety of ways: (1) Ethylene mixed with air and given with the usual simple gas apparatus; (2) ethylene-oxygen with partial rebreathing; (3) ethylene-oxygen with carbon dioxide absorption and complete rebreathing; (4) endotracheal ethylene-oxygen. The results obtained in 120 administrations of ethylene are summarized by C. Langton Hewer (Lancet, London, 208: 173, Jan. 24, 1925) where the operations included abdominal exploration, amputation of the breast, excision of cysts, glands, ganglia and polyps, incision and drainage of abscesses, suture of tendons, circumcision, tonsillectomy, and dental extractions. The average time for the induction of anesthesia was one minute and 50 seconds. No case gave rise to any anxiety during the operation. Anesthesia was completely satisfactory in 110 cases with ethylene or ethylene-oxygen only. The noticeable lack of after-effects constitutes the chief advantage of ethylene anesthesia. Of the 120 patients, only 10 vomited at all and 2 of these had received some ether. Most patients exhibit some aphasia for a few minutes after coming around, but if the time of anesthesia has not exceeded 10 minutes they can usually walk without assistance

within 3 minutes after administration of the anesthetic has ceased. Only 2 patients complained seriously of the odor of this gas; an odor which is distinctly perceptible during the first few inspirations but which becomes unnoticeable as unconsciousness rapidly supervenes.

R. Stuart Adams (Anesthesia & Analgesia, 4:157, June 1925) reports on his personal experience with the administration of ethylene in 131 major and 339 minor operations during the past few months and summarizes his conclusions as follows: (1) Ethylene is to be preferred to nitrous oxide for patients suffering from diabetes, pulmonary tuberculosis, and cardiac diseases from any cause. (2) Ethylene cannot be expected to displace ether as an anesthetic but it will be used more frequently in the future because it can be employed with greater satisfaction in all operations except those that require complete relaxation. (3) Any one who will give ethylene a fair trial will find it a useful and valuable adjunct to the equipment of the anesthetist.

### A NEW METHOD OF GENERAL ANESTHESIA: MORPHIN-SCOPOLAMIN.

Pierre Fredet and Regina Perlis (Clin. ophth., Paris, 28:684, Dec., 1924) have modified the common method of administering morphin-scopolamin prior to general anesthesia, by following the subcutaneous injection of these substances (1 cg. morphin hydrochlorid, 0.66-0.75 mg. scopolamin hydrobromid) with an intravenous injection of 5-8 c.c. somnifen after 15-30 minutes. The amount of chloroform or ether necessary is greatly reduced in this way: 5 gm., 2 gm., a whiff, or none at all in a number of cases. Usually a whiff is required during the skin incision and skin sutures.

The advantages of the method for the surgeon are: (1) A special anesthetist can be dispensed with. (2) The need of haste is obviated. (3) There are few or no disagreeable ether or chloroform fumes about the operating room. The advantages for the patient are: (1) Vomiting practically never occurs (twice in 60 operations). (2) The patients can take nourishment (in the absence of contraindications) up to the moment of operation and can take water and food very soon after it. (3) In the doses indicated, the barbiturates have no toxic effect on the cardiac and respiratory centers. The only disadvantages are: (1) The patients remain in a torpid condition for 24-36 hours, and have to be reminded to drink, to urinate, etc. There is nothing disquieting about this condition, but it should be known to the surgeon undertaking to use the method. (2) Sometimes the patients toss restlessly toward the evening of the day of operation, and are liable to fall out of bed if not carefully watched. However, not the slightest harm has come to any of the author's patients, among whom were cases of eventration, and knee resections, thus demonstrating the needlessness of the rigid immobilization to which patients are today subjected. Patients who had on other occasions been given ether or chloroform anesthesia, expressed a decided preference for the new method.

## SCOPOLAMIN-APOMORPHIN AMNESIA IN CRIMINOLOGY.

R. E. House (Anesthesia & Analgesia, 4:162, June, 1925) relates his further experience in his field and expresses the conviction that this experiment will aid many innocent persons to avoid the humiliation of court trials and will assist in obtaining the conviction of a considerable number of criminals; he considers this so-called "truth serum" a safe and humane method of applying the third degree to the examination of suspects. A number of cases are related to illustrate the working of this treatment and the satisfactory results obtained. The process by which memory can be extracted, against the will, from an individual's subconscious mind is by injecting under the skin a sufficient amount of those drugs which tend to destroy temporarily all the functions of the brain except the activity of the center of hearing. The technic at present used, is as follows: To attempt to obviate excitement, if possible, he first gives an injection of scopolamin 1/100 gr. and repeats this dose in 10 minutes. Upon the expiration of another 10 minutes he injects scopolamin 1/200 gr. plus apomorphia 1/40 gr. This is often too large a dose for a person under 18 years of age and in some instances will produce convulsions, which, however, can be controlled by the use of chloroform. At the end of 20 minutes from administration of the third dose the memory test is started by showing the individual some article every 3 minutes until 4 different objects have been exhibited. Then in 5 minutes one may request the names of the articles in the order in which they were shown. If the person under examination remembers 3 of the 4 articles, another injection of scopolamin 1/200 gr. is administered. The next stage of the technic is to save all the scopolamin possible and also to avoid giving large doses thereof, which can be accomplished by contracting the synapses with chloroform. For absolute perfection, the administration should be carried to the point of complete surgical anesthesia, thereby temporarily destroying all functions of the 5 senses as well as every other function of the brain except the centers of circulation and respiration. When the discovery was made that the center of hearing could function normally while the other 4 centers were artificially asleep the condition was named "the House Receptive State, or the Examination State". House discovered that the center of hearing would function from 10 to 20 minutes before the next center could normally take up its function, and by the administration of scopolamin 1/200 gr. every 20 to 30 minutes the receptive state can be maintained for an indefinite period. In the examination state, the individual does not talk at random but will reply to a direct question, answering all questions as the answer is stored in the mind as a matter of pure memory. House believes that with clinical doses there is no harm nor danger in the use of scopolamin and that there is a tremendous field of usefulness for this drug in extracting the truth from individuals while in this subconsciousness state.

## In Lighter Vein

In 1620 the Pilgrims came to America in search of freedom.

In 1925 they are returning to England in search of the same thing.—Hamilton Royal Gaboon.

**Irresistible.**—Slick—"How do you get so many girls?"

Slicker—"Oh, I just sprinkle a little gasoline on my handkerchief."—Punch Bowl.

**How Editors Get Rich.**—I have just learned of an editor who started poor twenty years ago and retired with a comfortable fortune of \$50,000. This was acquired through industry, economy, conscientious effort, indomitable perseverance, and the death of an uncle who left him \$49,990.—Santa Fe Magazine.

**Judging by the Price.**—Mrs. Newrich—"I want to buy a piece of music for my little girl who is learning to play the piano."

Clerk—"Yes, madam. Here is 'Twilight' for twenty-five cents. How would that suit?"

"Oh, she's farther along than that. Why, last week she played a piece that cost fifty cents. Haven't you got something for about a dollar?"—Pitt Panther.

**Circumstantial Evidence.**—A country school board was visiting a school, and the principal was putting his pupils through their paces.

"Who signed Magna Charta, Robert?" he asked, turning to one boy.

"Please, sir, 'twasn't me," whimpered the youngster.

The teacher, in disgust, told him to take his seat; but an old tobacco-chewing countryman on the board was not satisfied; so, after a well-directed aim at the cuspidor, he said: "Call that boy back. I don't like his manner. I believe he did do it."—The Pepper Pot.

### All Kinds.

There are all kinds of week-end guests.

Those who come Friday morning and go home Tuesday afternoon.

Those who come Friday afternoon and go home Monday morning.

Those who come Saturday afternoon and go home Sunday night.

Those who come Saturday night and go home drunk.—Judge.

An acrobat knocked down by motor in Holborn last week executed a somersault and escaped. This is the sort of thing that sours our taxi drivers.—Passing Show.

"What time is it, Maud?" boomed her father from the top of the stairs.

"Fred's watch isn't going."

"How about Fred?"

—Tit Bits.



## County Society Reports.

### ATLANTIC COUNTY.

#### Meeting of the Atlantic City Hospital Staff.

Joseph H. Marcus, M.D., Reporter.

The Annual Outing of the Staff of the Atlantic County Society took place at the Linwood Country Club in May. Dr. Henry O. Reik, the editor of New Jersey State Medical Journal, was the guest of honor. Dr. Reik acknowledged his appreciation in the unstinted coöperation of the Atlantic County Medical Society and called the attention of the members to the several features being inaugurated in the pages of the Journal. In closing his remarks Dr. Reik thanked the members for any suggestions they might offer in constructively criticizing the Journal.

The June meeting of the staff was held at the Atlantic City Hospital on the evening of June 26, with Dr. Theodore Senseman presiding. After the formal dispensation of routine matters, Dr. Senseman read a letter from Father Moran in which was suggested the establishment of a \$50.00 purse to be given to the nurse attaining the highest average for theory and practical nursing. Father Moran also mentioned that there has been established a purse of \$100.00, known as the Board of Governor's prize, to be given to the nurse of the graduating class attaining the highest general average during the course. It was moved and properly adopted that a purse of \$50.00 be donated by the staff to be used as outlined above.

The Scientific Program comprised the following: "Microcephalus with Case Report", Jos. H. Marcus; "Report of Nose and Throat Service", John Pennington; "Report of Obstetrical service", J. Norman Quinn.

In part, Dr. Marcus stated that of the obvious primary abnormalities, the most striking is that of microcephalus as typified by that condition in which the size of the cranium and all contents remain distinctly below normal. Almost invariably it depends upon prenatal disturbances. Whipham briefly states that in this type the head is small and may present a condition of oxycephaly. The occiput is usually flattened and the forehead is narrow, laterally, and receding. Premature ossification of the cranial bones may or may not be present. Features are regular and fine, appearing large in proportion to the cranium. According to Feer it may be a matter of purely perverted development, the microcephalic vera of Giacomini, including types presenting abnormal convolutions, microgyria, and the like; or, the fetal brain may be injured and atrophied as a result of inflammatory or vascular lesions, a pseudo-microcephaly. The latter form of microcephaly belongs to the group of prenatal brain paralyses. As a rule, cases of this type present the manifestations of general muscular rigidity with or without paralysis, athetosis, etc., while true microcephalics are often very active and lively.

An extreme high grade of idiocy with a characteristic shape of the head is common to both forms. The small skull with retreating forehead and a particularly large nose suggests the head of a bird. The cranium may

be normal as to size at birth, but in this event the fontanelles close abnormally early and the sutures stand out as prominent ridges. Kelyneck defines this type of idiocy as depending not so much on the size of the head as on the shape. The head is narrow, of the cone-shaped type and the forehead markedly receding. The face, relative to the head, is large, the cheeks are plump, the nose is often fairly well developed, and chin was to be regarded as an atavism, a throw-back to our simian ancestors, or as a pathologic human one; the brain of the microcephalic does show some rather marked simian features in the presence of the occipital operculum, the orbital beak of the frontal lobes, and in the position on the surface of the brain of the cuneolimbic annectant gyrus, but so also does the Mongolian idiot. Shuttleworth, also, believes that microcephaly does not depend solely upon the diminutive size of the head. In his opinion, the limitation of the term, proposed by some, to cases in which the cranium circumference does not exceed 17 inches, is scarcely scientific. Sachs states: "the early closing of the sutures is not due to defective bony growth, but is due to the maldevelopment of the cortex."

The theories that this is an atavistic variation or the result of premature synostosis have both been disproved; the small skull is simply the envelope of the brain of which the normal development has been arrested, probably about the fifth month of gestation. Microcephalics usually come of a pronounced neuropathic stock, their brothers and sisters are often typical degenerates, and frequently one or more of them suffer from the same condition. The physical health of microcephalic children is usually not amiss, and under favorable circumstances they may live to adult, and even advanced years. Some simple occupation not requiring headwork, is their rôle; the mental being limited by the cranial capacity. But as old Fuller quaintly puts it, though "heads are sometime so little that there is no room for wit, they are sometimes so long that there is not wit for so much room". It has been remarked that long heads do not necessarily go with mental deficiency—sometimes the reverse.

Fillio reports a case occurring in a colored family in which the parents of the patient were cousins. Three brothers of the patient had also been microcephalic. The boy had a face resembling a monkey and usually crawled on all fours. He was an imbecile and could not speak, but only uttered shrieks. The roentgenograms of the skull showed a preponderance of cerebellum over cerebrum and the skull was in a general way more like that of a chimpanzee than that of a human being. Both parents suffered from alcoholism and syphilis. Watanabe outlines a male microcephalic idiot, 25 years of age, whose parents were cousins. He was the fourth child and had 4 brothers. It is noteworthy that the brother directly preceding the patient is likewise microcephalic. The author reports the autopsy findings which are both complete and interesting.

About 1890, the operation of craniectomy—i.e., the cutting of strips of bone from the cranium—was recommended in cases of microcephalus. This practice has, however, been



abandoned, owing to the disappointing results, and the knowledge that the small skull is simply moulded to the brain, the development of which has been arrested at the fifth month of intrauterine life. The endeavors to create space for the growing brain by means of craniectomy must be considered failures. "At best", says Broca, "a complete idiot would be converted into a half-idiot, which would hardly be a gain". Lannelongue attempted to relieve the condition by making new sutures so that the brain might expand, but his efforts were futile.

When signs of pressure are seen, however, as in oxycephaly, and in the rare cases in which there is a history of prematurely ossified fontanelles, operative interference may be justifiable. Beneficial results have been frequently obtained by cranial operations in cases of mental deficiency associated with traumatism, epilepsy, and paralysis; in such cases surgery should not be deferred until after the establishment of serious atrophic changes and degenerations.

**Case Reports.**—Baby, female, 9 months of age, third child of normal parents. Two other children age 7 and 5 are apparently normal, both physically and mentally; family history negative with the exception of the relationship between father and mother, which is that of first cousins. The birth of the baby was normal, but shortly after birth the mother's attention was drawn to the size and shape of the baby's head, at which time she did not regard it with any significance. Baby was first seen in February when 9 months of age, when feeding became difficult, and a convulsion had occurred.

The physical examination disclosed a very well developed and well nourished baby from the neck down. The head presented the following characteristics. The circumference was 13 in. (normal 17.2 in.) with a marked obliquity of the frontal region extending from the root of the nose backward, giving one the impression of an absence of the frontal area. Baby would indulge in purposeless movements of its head and upper extremities with its mouth open and a semblance of a grin on its features. The fontanelles were closed and the sutures over-lapping. Weight of the baby 15½ lbs. (normal 17.2). This was the beginning of a series of seizures that became exaggerated in quality and quantity and when seen on April 17 convulsions approximated a constant sequence of seizures beginning in the upper extremities but with no regular localization in either extremity. Feeling that this sudden onset of convulsive seizures was due entirely to intracranial pressure, an operation for the relief of this pressure was decided upon. On April 18 a lambdectomy was performed. The dura was exceedingly tough and almost sclerotic in character and when the brain tissue was exposed there was a gush of liquid, grayish in color and clear. The part of the brain that was exposed showed a marked deficiency in the number of cerebral depressions. The parietal scalp incision was closed and the baby given hypodermic injection of camphorated oil. About 7 hours later the baby died as a result of shock. Both parents realized the futility of a successful operation with regard to its mentality, but I felt justified in advising an operation with the

hope of diminishing the severity of symptoms caused by the gradual and constantly increasing intracranial pressure.

Dr. Norman J. Quinn, attending obstetrician, outlined his report as follows: The obstetric cases from January 1 to May 1 concerned 91 patients. Of these, 13 were of such a nature as to be classed as abnormal cases; there were 2 breech presentations, 2 required version, 2 induction of labor, and 6 the application of low forceps.

The average number of days in the hospital was 9. This figure is low—due first to the fact of crowding in the wards, necessitating sending patients home sooner than otherwise would have been done; secondly, because of an attempt to get out of bed on the seventh or eighth day by those multipara of robust type, and we feel in this type of case not only is no harm effected but, perhaps because of better drainage of the vaginal canal and a resumption of general body functions, a definite benefit is accomplished.

A decided preponderance of colored patients were noted—there being 59 colored to 32 white patients. This we feel is due to a greater willingness on the part of colored people to be public patients. We had one death of a mother, due to a ruptured uterus effected outside the hospital.

Of the babies, 5 were still-born—1 being premature, of a decided choreic mother; 2 luetic; 1 due to ruptured uterus after repeated attempts at forceps delivery outside; 1 as a result of a prolapsed cord; 2 other babies died after birth, 1 of a severe purpura hemorrhagica and the other from a severe continuous hemorrhage from the cord.

Two cases of syphilis in mothers were found. Two cases of eclampsia were treated—both mothers recovering, one of the babies dying within 24 hours from the toxemia, the other recovering. Forceps were applied in 7 cases, all being low applications. No accidents of application occurred. Two sets of twins were delivered. One set lived; the other died within 24 hours, being of a luetic mother and born prematurely. Episiotomy was done in 7 cases where an inevitable tear was foreseen. There were only 5 complete tears in the entire series. Labor was successfully induced in 2 cases by the introduction of bougies; 1 case at eight months because of a menacing nephritis and the other for threatening eclampsia; both mothers and babies survived. One case of ophthalmia neonatorum and 1 case of conjunctivitis occurred.

Throughout the entire series, except in such cases as showed some marked contraindications, a routine practice of putting all delivered mothers on a back-rest at 45° angle after 24 hours was carried out. This was done for better vaginal drainage and the avoidance of what we believe occurs in many of these cases, absorption from the vaginal tract. A survey of the temperature charts of this series convinces us that this procedure was very effective. Another routine order was the feeding of a full diet after 24 hours provided no contraindications were present. This, with the idea of avoiding overengorgement of the breasts so commonly seen in cases where a liquid diet or forced liquid is given. While it seems a more established practice to encour-

age liquids to be taken with the idea of encouraging mammary functions, we believe this overengorgement to bring about a reverse condition. While the mothers were somewhat slower to produce a free flow of milk, there was not once noted any over-filled, painful breasts, and very few cases requiring either massage or artificial emptying of breast. We believe that a more lasting breast function will be established by following this course. We also believe that many cases are better treated by allowing them a back-rest sooner than has been the custom, and that perhaps there is a large class of patients who should be greatly helped by allowing them to be up in a chair rather than the longer period of rest in bed.

The nose and throat service under Drs. J. Pennington and C. D. Sinkinson embodied a series of tonsillectomies numbering 166, with several mastoid operations. This service comprised September to December inclusive with no mortality.

#### CUMBERLAND COUNTY.

Elton S. Corson, M.D., Reporter.

The Cumberland County Medical Society convened at the Hotel Cumberland, Bridgeton, on the afternoon of July 7, Dr. E. C. Lyon presiding. Drs. G. N. Thomas, of Vine-land, and D. S. Bostwick, of Bridgeton, were elected to membership.

The annual picnic will be held in August. Dr. William H. Schmidt, of Philadelphia, delivered a very interesting illustrated lecture on "Treatment of Cancer", and spoke of the relative value of various methods in use at present. Cancer is steadily on the increase. One female in 8 and one male in 10 contract the disease.

One or all methods now in vogue are required to alleviate the disease. Most skin cancers yield to the effects of electric coagulation or x-ray or radium. Internal cancer requires surgery and all the other adjuvants to eradicate or alleviate the disease.

Dr. Henry O. Reik, editor of the State Medical Journal gave a most interesting address on "Periodic Health Examination".

#### HUNTERDON COUNTY.

A special meeting of the Hunterdon County Medical Society was held at the Glen Gardner Sanatorium, upon invitation of the superintendent, Dr. Samuel B. English, on the afternoon of July 24. The members were entertained at dinner and then invited to inspect the institution. During the course of inspection, Dr. English exhibited a series of cases of tuberculosis under treatment by the Alpine Lamp and another group of patients that have been most remarkably benefited by the production of artificial pneumothorax; this operation was demonstrated upon 2 patients by the resident surgeons to illustrate how simple a procedure it is in trained hands.

The inspection of the hospital occupied a large part of the afternoon and, owing to the small number of members that could remain beyond that hour (there had been but 11 present), it was decided to postpone until the October session Dr. Reik's lecture on "Periodic Health Examinations".

#### STATE SOCIETY DUES.

At the recent annual convention there was considerable discussion as to the proper course to pursue with those members who fail to pay dues promptly and thus cause embarrassment to the County Society and much trouble for state organization. The Indiana State Medical Journal, March issue, contained the following suggestions:

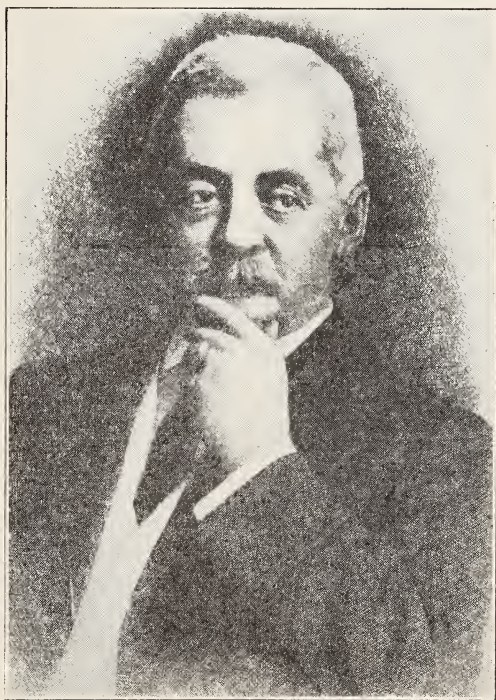
"We suggest to officers of county medical societies that they publish a list of delinquents in their regular announcements. This is entirely proper and is a warranted means of showing 'who's who' in the medical society. There really is no excuse for delinquency, for medical society dues are payable in December and become delinquent on February 1. The amount is not large enough to be a hardship to any doctor, and especially when it is known that provision must be made for it. Furthermore, there is no reason why the secretary should be obliged to call upon procrastinating doctors repeatedly for a payment that should be made without solicitation. A notification should be sufficient, and will be if it is understood that the names of delinquent members will be published and membership withheld from those who fail to live up to their obligations. In this connection we note that it is a strange thing that doctors who are delinquent in their dues to medical societies are never delinquent in their dues to country clubs. A man will pay from \$1 to \$500 for membership in a country club, and from \$75 to \$200 each year in dues, and never bat an eye and never fail to have his payment in on time, but he will neglect to pay \$10 or \$15 as dues to his medical society, get mad at the secretary for being solicited for the dues, and finally threaten to withdraw from the society because he thinks he is mistreated. In the case of the country club, his name is posted conspicuously if he doesn't pay his indebtedness between the first and tenth of each month and he not only is refused further credit but is thrown out of the club if he does not promptly clear up his delinquency. In the case of the medical society there is very little penalty for delinquency and in consequence he abuses all the leniency that is shown him. When we begin to penalize our members for delinquency and infractions of ethics we are going to get somewhere. The man who threatens to leave the medical society ought to be permitted to carry his threat into execution. He is the fellow who if he gets into trouble is the first to court the good opinion of organized medicine and ask for its assistance. Medical societies must have not only the moral but financial support of doctors in order to accomplish their purposes. The money we put into medical societies is insignificant as compared to the money that we spend in a hundred other ways without getting a tenth as much return. We ought to be ashamed of ourselves for any negligence in helping support medical societies by prompt payment of dues, and we deserve penalization if we do not accept the obligation and live up to it."



## Death

WATSON, William Perry, of 812 Montgomery Street, Jersey City, died in the City Hospital July 17, 1925, of pneumonia following an accident. On July 9, while crossing the Hudson Boulevard, Dr. Watson was struck by an automobile and suffered a concussion of the brain. Pneumonia developed a few days later and all efforts to save his life proved unavailing.

William Perry Wason was born at Bolton-on-Lake George, May 17, 1854. He received his education in the schools of New York and New Jersey, graduating from Rutgers College in 1875 with the degree



of A. B., and from the College of Physicians and Surgeons in 1878 as an M. D. His career as a physician has been one of unceasing activity and of great credit to himself and to his profession. Instrumental in securing the first legislative act to regulate the practice of medicine in New Jersey, he had continued a member of the State Board of Medical Examiners from its inception until the time of his death.

Specializing in the study of pediatrics, Dr. Watson became one of the distinguished leaders in that branch of medicine and had recently been elected President of the American Pediatric Society. His scientific writings were numerous and covered a wide range of topics, and he was the founder, in 1884, of the Archives of Pediatrics, a monthly journal devoted exclusively to diseases of children, the first of its kind published in the English language and still recognized as one of the foremost special periodicals.



## Announcement

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It has been customary to give notice of the whereabouts of the officers of the State Society during the summer months and we present here the addresses where they may be most promptly reached by any special communication between now and October 1, 1925:

Mail will be forwarded to the President, Dr. Lucius F. Donohoe, after August 1, if sent to his regular address, 140 West 8th Street, Bayonne, New Jersey.

The Secretary, Dr. J. Bennett Morrison, will be at Everett Chambers, Oak Street, Portland, Maine, between August 1 and August 21, and after that date he will be in touch with his office, 97 Halsey Street, Newark, New Jersey.

The Secretary of the Board of Trustees, Dr. James Hunter, Jr., will spend the period between July 22 and September 1 at Camp Littlewood, West Point, Maine; returning to his home address after the last mentioned date.

Communications for the Chairman of the Publication Committee, or for the Editor, should be sent in accordance with instructions at the head of the editorial page.

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## A SPECIFIC TEST FOR SYPHILIS: THE PRESENT STATUS OF KOLMER'S COMPLEMENT FIXATION TEST FOR SYPHILIS AS ESTABLISHED BY A CRITICAL COMPARISON WITH NUMEROUS OTHER METHODS.

ROBERT A. KILDUFFE, A.B., A.M., M.D.,  
Director of Laboratories of the Atlantic City Hospital.

Syphilis was so named by Hieronimus Fracastorius in 1521 and since that time has been, in all probability, one of the most widely discussed of all the diseases to which the human race is subject. In spite of the interest attaching to this disease, its protean manifestations, and its enormous economic and sociologic importance, but little was added to the knowledge displayed by Fracastorius in his poem "Syphilis sive Morbus Gallicus" until nearly 400 years later when the elaboration of the complement fixation test by Wassermann, Neisser, Bruck and Detre and the discovery of the *Spirochaeta pallida* by Schaudinn and Hoffman placed the diagnosis on a definite basis, to be followed by the epoch-making labors of Ehrlich by which rational and effective treatment has been made possible.

In spite of the relatively enormous advances which have been made in our knowledge concerning the diagnosis and treatment of syphilis, the question is by no means a closed one and much remains to be accomplished and hoped for before the last chapter may be written. Indeed, it may be maintained that in spite—perhaps because—of the remarkable advances which have been made, it behooves the profession to take stock, as it were, of the knowledge which has been and is being gained and to readjust many of the somewhat loose and hazy impressions which have gained a greater or less circulation.

This can only be done through the collection, analysis, and correlation of available data. It cannot be gainsaid, for example, that there is a rather definite impression abroad to the effect that much of the necessity for the careful and detailed clinical study of syphilis and its manifestations has been obviated by the application of the complement fixa-

tion test and the dark field examination to its diagnosis, just as, also, there are those who look upon its treatment as a relatively simple matter of a sufficient number of injections of neo-arsphenamin to secure several serologic negatives. That such impressions exist is to be regretted but cannot be denied; that they should be combated and eradicated is a matter of the highest importance. In fact, it is because of this attitude and this malinterpretation of many factors related to diagnosis and treatment that attention has been focussed upon the development of uniformity in both diagnosis and treatment in so far as this is attainable.

The treatment of syphilis must be preceded by its diagnosis and it is not yet generally admitted that the complement fixation reaction is at once the most delicate and the most constant single symptom of the disease. The discovery of the complement fixation test and its application to the diagnosis of syphilis followed, in its aftermath, the usual course of comparable discoveries in the history of medicine. At first hailed as an infallible and unerring means of detecting syphilis, imperfectly applied and unwisely interpreted, a certain measure of disrepute became its lot and it is only now that its true position is becoming evident and appreciated. For a long time, and it may be ventured, even now to some degree, a Wassermann test was a Wassermann test regardless of by whom or how it was made or under what circumstances—a viewpoint which is quite untenable if one considers even for a moment the variety of modifications, technical variations, and degrees of skill and experience which affect its performance and interpretation, as well as the ever-present and incalculable personal factor invariably and inextricably associated with all of these and definitely influencing and modifying the results obtained.

It is largely due to the varying results consequent upon variations of technic that a demand has arisen for some uniform method of performing the complement fixation test in syphilis—for so little remains of the method originally described by Wassermann that the test is better so named.

This demand has been, perhaps, most insistently voiced by the clinician though the serologist has recognized the necessity and, in response, various methods have been proposed by different workers as a "standard test". The problem is not without its inherent difficulties apart from those attaching to matters of technic. By a "standard test" the clinician cannot and must not hope for a method which will be infallible in its results and invariable in its significance, nor which will render unnecessary the careful clinical examination and study of each individual case. This is impossible because of factors inherent in the disease and associated with the reactions of individuals to its stimuli. It is the patient, after all, who produces the reacting substances detected by the complement fixation test and his ability to respond to stimulation cannot be



standardized. This has been touched upon elsewhere,<sup>(2)</sup> as well as the fact that the results of the test must always be interpreted and evaluated in the light of all the findings in each particular case.<sup>(3)</sup>

What is to be hoped for is a method which shall be sensitive, delicate, and reliable and which in the hands of different workers shall give comparable results. This becomes an increasing necessity in view of the wide-spread and somewhat parental interest evinced by state and municipal organizations in the detection and control of this disease; for it is equally regrettable that either syphilitics shall be missed or those under treatment prematurely dismissed because of insensitive methods of serologic examination, as that nonsyphilitics shall be subjected to unnecessary treatment because of fallacious positive reactions.

While separate portions of the same blood tested by different observers may and should be, as a rule, expected to give similar results in so far as positive or negative reactions are concerned, this will only occur when both workers are using similar technics or methods comparable in their degree of sensitivity. Even when both workers are using the same method identical results are not always encountered when the specimens, though from the same patient, are taken after varying intervening periods; this is because of the fact, conclusively demonstrated, that the amount of reagin present in the blood may be subject to marked and unaccountable variations within relatively short periods of time and without regard to treatment administered. The adoption of a uniform method of applying the test, however, might be expected to reduce the disagreements encountered to the irreducible minimum and to obviate all but the factor of personal equation in the reading of the results, and even this may be rendered negligible if the technic be quantitative in character. A very definite difficulty in the development of a standard technic is the securing of its general adoption, for there is always to be overcome the inertia arising from personal preference, the individual satisfaction accruing from past and evaluated experience, and even at times, a more active opposition found upon bias and prejudiced. It is one thing to construct and propose a method as suitable, and almost as difficult an achievement to secure its extensive and unbiased trial and subsequent adoption.

These are the reasons, perhaps, why various methods which have been proposed at various times have failed to attain extensive trial. There are none, apparently, which have been as widely subjected to comparative and critical and, at times, even hypercritical trial as that proposed by Kolmer<sup>(4)</sup>, the technic of which is based upon the painstaking investigations conducted by this worker and his associates over a period of 6 years, beginning in 1915. Possibly because of the inclusive and meticulous character of the series of investigations upon which the new technic is based; perhaps because of the definite variations it presents from methods in common use; the new antigen included in it; the

open-mindedness of the majority of serologists attracted by a method furnishing a logical reason for every step in its performance; and the renewed impetus recently given to the development of a "standard test", this method has received an exceptionally wide-spread consideration and has been tried in comparison with a diversity of technics by a large number of workers.

It is the purpose of this communication to summarize the results so far reported with a view to ascertaining as far as is possible the present status of the method. Attention will be focussed mainly upon the 2 prime and essential requisites of any "standard" method: delicacy and practical specificity.

If any new method is to receive anything approaching a general adoption it will be mainly because of the demand for it created by the clinician. If, as is undoubtedly the case, a certain number of individuals are to be diagnosed as syphilitic more or less solely upon the serologic findings; and if a still greater number are to be dismissed from treatment following a few serologic negatives—if, in other words, as unfortunately cannot be denied, the complement fixation reaction is to be given an unwarranted and predominant place in the management of syphilis, then it is, above all things, essential and of prime importance that a "standard" method shall be free from any imminent possibility of giving false positive reactions and, at the same time, sufficiently delicate to detect reactions otherwise missed. If the clinician is to demand such a test he must first be convinced that it conforms to these requirements and such a conviction must be based upon the collection and analysis of impartial data.

The technical adaptability and feasibility of Kolmer's quantitative complement fixation test for the small as well as for the large laboratory, the necessity for and clinical utilization of the quantitative factor; its adaptability through this factor not only to the clinical treatment of syphilis, but also to the experimental evaluation of new drugs, new methods, and modifications of old ones, as well as the relation of the quantitative method to the psychology of the syphilitic under treatment have all been touched upon in other places.<sup>(Ref. 5, 6, 7, 8 and 9.)</sup>

In the present paper the results reported by different workers will be considered with special reference to (a) delicacy, (b) specificity, (c) results in syphilis, and (d) results in diseases other than syphilis.

In Table I are grouped the reports upon which the paper is based, a total of 88,357 tests.

TABLE I.

Author	Number of Tests
Cohen and Haythorn .....	1400
Dutton and Thompson .....	501
Harper and Curtis .....	120
Hartman and Reyner .....	6947
Irvine and Stern .....	5162
Johns and Jones .....	500

Kellogg	9307
Kellogg, Wells and Beck	506
Kilduffe	1014
Kilduffe	2000
Kilduffe	104
Kilduffe	2180
Kilduffe	300
Kolmer	355
Kolmer and Denney	159
Lorenz and Bleckwenn	997
Maynard	806
Ottenberg and Wisler	204
Palmer	2500
Palmer and Gibb	362
Palmer	2502
Rockwood and Sanford	500
Sanford	4740
Sanford	16772
Butler	700
Goodhue	1000
Schamberg and Greenbaum	4000
Schamberg and Klauder	2000
Shivers	320
Smith	94
Reyner and Hartman	20305
Total	88357

It is quite probable that no other technic has been subjected to comparative investigation in so large a series or by so many different workers and the value and significance of the findings are enhanced, if indeed they do not arise in essence, from the very multiplicity of the workers and the variety of the methods with which the Kolmer technic was compared.

The mere collection of a large number of tests is not of value per se. Their significance and the value to be attached to the conclusions to be drawn from them is dependent upon the following factors and conditions forming an integral part of the individual investigations and their conjoint results:

(1) In each instance the Kolmer test was subjected to comparative trial with a method familiar to the authors and which on the basis of past experience was regarded as reliable and sensitive and which, it is to be presumed, they would be unwilling to cast aside and supplant without good and sufficient reasons. These assumptions are borne out by such statements, relative to the test with which the Kolmer method was compared, as the following: "The routine test has been in satisfactory use for a period of 10 years" (Cohen and Haythorn). "The Kolmer method was compared with a technic found clinically and experimentally superior in 30,000 tests" (Dutton and Thompson), "The Kolmer method was used against a technic used for 7 years and found satisfactory in over 80,000 tests" (Lorenz and Bleckwenn). It may be safely predicated, therefore, that no pre-investigative bias existed in favor of the Kolmer method and that its adoption in place of the method with which it was compared, which occurred almost uniformly, was due to its superiority.



(2) All the investigations were made and controlled under strictly experimental conditions as it were; every effort possible was made to collect full clinical data on the cases tested and to correlate these with the results of the complement fixation reaction, particularly when there was disagreement between the methods used.

(3) A particular and sustained effort was made by practically every worker to subject the Kolmer test to stringent trial in those conditions generally accepted as giving false positives with methods heretofore used.

(4) With the exception of Dr. Kolmer, none of the workers were associated with the development of the test and, therefore, were not biased in its favor. In fact, a few, it may be hazarded, may be looked upon as even reluctant in their final conclusions as to its advantages.

As has been stated, a "standard test" must conform to many requirements. These may be advantageously considered as (1) those more or less referable to laboratory problems of technical character, and (2) those referable to clinical problems and the clinician. I shall confine myself here to those requirements referable to the clinician, having elsewhere discussed those referable to the laboratory and the serologist.

It cannot be too strongly emphasized, however, that to obtain the excellent results possible with the Kolmer technic it must be used exactly as described by the author to the minutest detail and that deviation, no matter how apparently minor, will be reflected in a diminution in the sensitivity and delicacy of the results. The clinician, therefore, who desires that his complement fixation tests be made by Kolmer's method should assure himself that it is in fact being used by the serologist to whom his work is referred. One is not obligated to take the position that the Kolmer technic is perfect, final, and irrevocable as it stands. In view of the fact, however, that so many workers have employed it as described with satisfaction and without difficulty, when one fails to attain a similar satisfaction or encounters difficulty at the outset, it appears logical if not to say just and fair to the originator, to assume that the source of difficulty lies not in the technic, but in the application thereof, and to grant that it were well and advisable to achieve technical and manipulative facility with the method and to utilize it as described before introducing any change, however minor in appearance. It is also logical and, again, seems fair and just that, inasmuch as the construction of the technic is based upon careful and extensive investigations, any modification should be based upon investigations, at least as meticulous and of comparable extent. Finally, in all honesty, to state that one is using Kolmer's technic and to render reports as by his method should signify that his method is being used without deviation. To use a part of Kolmer's test coupled with one's own method of reading results or one's own antigen, while permissible as an experiment or an investigation, does not warrant the statement that Kolmer's method is

the one in use. Under such circumstances what is really in use is a hybrid something composed of neither Kolmer's nor anyone's else technic but a makeshift combination certainly not described by Kolmer as his technic.

An objection has been raised, and especially by the clinician, to the long primary period of incubation in Kolmer's method, namely, overnight, whereby it becomes necessary to report the day following on the original set-up. This objection ceases to be valid, however, in view of the fact that extensive preliminary observations prior to the construction of the technic have shown that the 15-20 hour primary incubation period is an integral part of the test and one of the reasons why the results obtained with it are superior both in sensitivity and specificity. As has been discussed in another place,<sup>(10)</sup> this objection is without real or essential validity or force. In his original communication, Kolmer states that, if compulsory, a period of 4 hours may be used in place of the overnight incubation in the ice chest, the main effect being upon the delicacy of the reactions so obtained.

Inasmuch as some may hesitate to adopt the technic because of the delay thus caused in rendering reports, and with the purpose of ascertaining the exact differences referable to the primary incubation period, I have recently studied a series of 300 serums all tested by the quantitative method but using different methods and periods of primary incubation, as follows: (1) Four hours in the ice chest at 6°-10° C.; (2) 4 hours in an ice and salt brine at 6°-10° C.; (3) overnight in the ice chest at 6°-10° C. The second method was a modification of that originally described by Duke<sup>(11)</sup> who found that a primary incubation of 1 hour in an ice-water bath was equivalent to 4 hours in the ice chest, which conclusion has been amply corroborated by myself and others.

The purpose of the modification was to ascertain if a 4 hour period in an ice-water bath would likewise give results comparable to 16 hours in the ice chest. The results of this investigation, which have been reported elsewhere,<sup>(12)</sup> quite definitely demonstrated that not only was the quantitative character of the tests more clearly brought out by the longer incubation period, but what is more important and significant, while the number of positive reactions detected by both 4 hour periods was practically the same, there were 9.6% more positive reactions picked up by the overnight incubation, these being mainly the weaker positive serums.

The overnight primary incubation period, therefore, is a valuable integral and important part of the technic and cannot be disregarded except at the expense of sensitivity. This being true, objections to the method based on this count must fall. The crux of the situation may be summed up in a sentence: "The clinician or internist cannot evade a thorough physical examination because it is time-consuming, nor the

surgeon the adoption on an efficient technic simply because it is laborious. The serologist and syphilologist in a similar situation must take the same stand. <sup>(13)</sup>

### **The Requirements of the Clinician for a Standard Test.**

These may be listed as follows: (1) Adaptability to varied conditions. (2) Practical specificity for syphilis, thus giving no false positive reactions. (3) Delicacy. (4) Agreement with clinical findings. (5) Suitability for the estimation and detection of the effects of therapeutics as well as for the experimental investigation of the value of drugs and methods proposed for the management and control of syphilis. These may be advantageously considered separately.

I. ADAPTABILITY TO VARIED CONDITIONS.—A standard test must cope with all sorts of conditions from the ideal to the relatively vile. One of the great difficulties experienced by both large and small laboratories, and especially by public or municipal laboratories, is the receipt for examination of specimens which have been kept too long or delayed in transit, or improperly collected and which are thus received badly hemolyzed and thus likely to give anticomplementary reactions. Even under the best of conditions, a certain proportion of anticomplementary reactions occurs and serves as a source of annoyance to both patient and clinician; to the former because another specimen must be taken, and to the latter because he is at times unable to understand why a specimen should give such a reaction unless there had been laboratory faults or errors.

The remarkable freedom of the Kolmer test from anticomplementary reactions is noted by all observers working with it. A personal experience of nearly 10,000 reactions shows an incidence of only 0.7% of anticomplementary reactions embracing some serums received in the most deplorable condition. Irvine and Stern<sup>(14)</sup> state that the test is reliable on sera kept for 4 days and I have secured clean-cut negative and positive reactions on badly hemolyzed sera after 5-10 days in the mails from Mexico, and serums sent from the Canal Zone to Philadelphia (Kolmer), and from Seattle to Philadelphia (Kolmer), have all been found quite suitable for examination by Kolmer's method.

II. SPECIFICITY OF THE KOLMER TEST FOR SYPHILIS.—Specificity implies that a positive reaction shall not occur in conditions other than syphilis. It is obvious that as the complement fixation reaction is not a true antigen-antibody reaction in a strict biologic sense, true biologic specificity cannot be expected. All that can be hoped for is high degree of relative specificity. Particular interest attaches, therefore, and particular attention was focused by all workers upon the results obtained with the Kolmer test in syphilis and in those nonsyphilitic conditions heretofore reported as giving false or nonspecific reactions with the majority of methods in common use.



It is obvious that in 88,357 reactions covered in this survey there were included a large number of varied and nonsyphilitic conditions which are not tabulated; in fact, it is conceivable that but few of the ordinary diseases to which the human race is subject were missing from the serried array of patients utilized in the combined investigations.

An impressive number of important conditions frequently said to give false positive reactions is shown in Table II.

TABLE II.

Results in the Kolmer Test in Nonsyphilitic Conditions Reported as Giving Nonspecific Fixations with Other Methods.

Disease	No. Tested	False Positives	Author
Tuberculosis, pulmonary . . . .	100	None	Hartman and Reyner
Tuberculosis, pulmonary . . . .	104	None	Kilduffe
Diabetes . . . . .	86	None	Hartman and Reyner
Diabetes . . . . .	3	None	Kilduffe
	35	None	Kolmer and Steinfield
	500	"2 probable"	Sanford & Rockwood
Pregnancy . . . . .	130	None	Hartman and Reyner
	90	None	Irvine and Stern
(cord blood) . . . .	85	None	Kilduffe
	23	None	Kilduffe
	94	None	Smith
Pneumonia . . . . .	45	None	Hartman and Reyner
	14	None	Kilduffe
	16	None	Kolmer and Steinfield
Uremia and nephritis . . . . .	3	None	Kilduffe
	14	None	Kilduffe
Leprosy . . . . .	159	None	Kolmer and Denny
Malaria . . . . .	25	None	Kolmer
Pernicious anemia . . . . .	2	None	Kolmer
Jaundice . . . . .	15	None	Kolmer and Steinfield
Hypercholesterolemia . . . . .	L'ge No.	None	Thalheimer & Hogan
Thyroid conditions . . . . .	1	None	Kilduffe
Gastric carcinoma . . . . .	1	None	Kilduffe
Scarlet fever . . . . .	L'ge No.	None	Kolmer
Trypanosomiasis, experimen- tal in animals . . . . .	L'ge No.	None	Kolmer
TOTAL . . . . .	1548		

It will be noted that practically no false positive reactions occurred, only 2 probable nonspecific reactions being reported; in other words, syphilis could not be ruled out with absolute certitude.

The practical specificity of the complement fixation reaction in syphilis depends upon whether or not the lipotrophic antibody or reagin responsible for the reaction may be present in diseases other than syphilis. It is known that such a body is present in one other condition—frambesia or yaws—in which, because of the close biologic relationship between its cause, the *Spirochæta pertenuis*, and the *Spirochæta pallida*, positive reactions are obtained with syphilitic antigens with the same frequency as in syphilis. There may be other conditions in which reacting bodies may be present or in which the serum may acquire the property of reactivity with syphilitic antigens, but experience with the Kolmer test conclusively demonstrates that they may be evaded as causes of false positive reactions by refinements of technic. Large series of such conditions as those tabulated

in Table II are not easily nor rapidly collected, for obvious reasons, nevertheless, the total number reported—1548—possesses a definite significance and indicates that false positive reactions are extremely rare with the Kolmer method, if, indeed, they occur at all. The significance of the table is enhanced by the fact that it represents the results of numerous investigators, the personal factor thus being eliminated.

The conclusion is warranted and unavoidable that when a positive reaction is obtained with Kolmer's test in the face of discordant or absent clinical data, the burden of proof lies upon the clinician and a thorough, exhaustive, and meticulous search for clinical evidence of syphilis is indicated. In this connection it must not be forgotten that syphilis may be latent and asymptomatic and that a positive complement fixation test may be the only detectable sign of the disease; evidence detectable by ordinary means may be lacking even at postmortem and a secluded and relatively inaction focus still present but visible only to the microscope.

Among the investigators reporting, both serologists and clinicians, there is a remarkable uniformity of opinion as to the freedom of the Kolmer test from false positive reactions.<sup>(15)</sup>

Cohen and Haythorne note "one probable false positive in pregnancy and one in a child with meningitis", and Rockwood and Sanford<sup>(16)</sup> report "two probable false positive reactions in diabetes. It must be noted, however, that these authors, while feeling that the cases in which these positive reactions occurred were probably not syphilitic, nevertheless, frankly own themselves unable to state this as a definite fact. All other investigators definitely note the freedom of the Kolmer method from false positive reactions and consider the test highly reliable; Hartman and Reyner<sup>(17)</sup> indeed, speak of the Kolmer test as "a specific test for syphilis".

An important feature of this high degree of specificity is the added value and significance thus imparted to weakly positive reactions by this technic, those reactions which with other methods could only be reported as doubtful and indefinite. Unexpected and weakly positive reactions by Kolmer's method, therefore, cannot be lightly regarded and may be looked upon as of definite significance and due to clinically undetected syphilis. It is obvious, of course, that a positive reaction does not necessarily signify that the particular lesion or the condition complained of by the patient is of syphilitic origin. This should be a clinical truism but is, nevertheless, sometimes overlooked.

So overwhelming is the evidence of the specificity of the Kolmer test that when clinical opinion disagrees it must be taken into consideration that clinical evidence and clinical judgment may sometimes be in error.

III. THE CLINICAL REQUIREMENT OF DELICACY.—It cannot be expected of any method ever to be devised that it shall unerringly detect all cases of syphilis. This is impossible because of the fact that

syphilis is in essence a tissue disease and the reacting substances detected by the complement fixation reaction are the result of the products of the interaction between the spirochetes and the tissues. Their presence in detectable amounts, therefore, is dependent upon and related to both the aggressiveness of the invading organisms and the ability of their host to respond to the stimuli thus exerted. As is well known, a definite period elapses after the appearance of the primary lesion before reagin appears in the blood in detectable amounts. In the early days of the primary lesion, therefore, the complement fixation test is often negative and less reliable than the dark field illuminator as a means of diagnosis. Similarly, when the infection is latent, when the spirochetes lie dormant and inactive in walled-off foci, so quiescent that the customary gathering of lymphocytes is hardly perceptible, it is not to be expected that reagin will be present in the blood in amounts detectable by even the most delicate technic, such as Kolmer's. What the clinician can demand, however, is that the standard test shall be capable of detecting the presence of reagin in very minute quantities; that positive reactions shall be due solely to its presence, and not false or nonspecific positive reactions; and that they shall have a definite and clear-cut diagnostic significance.

The clinical requirement of delicacy demands that the complement fixation test in syphilis shall be most reliable when the clinical evidence is weakest and most unreliable, thus being inseparable from the requirement of practical specificity. The delicacy of the Kolmer test is well shown by the results obtained with it in varying stages of syphilis tested under varying conditions. The clinician must recognize in connection with the use of the complement fixation test as a means of diagnosis that the test is merely one phase of the examination for the presence of syphilis. Nevertheless, as physical signs may be vague and misleading or even absent; as a history may be impossible to elicit, and as spirochetal foci may be present without the coincident presence of detectable physical signs—as has been abundantly proven—it must be appreciated that the complement fixation reaction is at once the most constant and most delicate single symptom of the disease.

The arbitrary period after the appearance of the primary lesion when the complement fixation test may be expected to become positive is set from 20 to 30 days. In view of this fact it is interesting to note as indicative of the delicacy of the Kolmer technic, that positive reactions have been reported as early as 3 days (Irvine and Stern), and 4 days (Kilduffe), after the appearance of the chancre. These reactions were definitely positive, fixation occurring in more than 1 tube. As even under the best of circumstances, a definite number of dark field examinations may be negative on a single examination, and as this possibility is increased when, as not infrequently happens, the lesion has been submitted to various methods of treatment, the importance of us-



ing the Kolmer test even when the primary lesion is recent must not be overlooked. The practical specificity and the delicacy of the method is such, therefore, as to render it of primary importance as an aid to the diagnosis of syphilis.

The treatment of syphilis is, at best, a protracted affair and, indeed, we have come to realize that not the least valuable factor in the treatment is its duration—the length of time during which it is carried on. As long as the complement fixation reaction remains positive, treatment is indicated and it is important to note, and indicative of the stability of the Kolmer method as a guide to efficient treatment, that all observers unite in saying that positive reactions are slower to disappear by Kolmer's test during treatment; on the other hand, as noted by Schamberg and Klauder<sup>(18)</sup> and corroborated by numerous others, the delicacy of the test enables it to pick up relapsing positives much earlier than has hitherto been possible and so enables the immediate resumption of treatment.

There is practical unanimity of all workers with the test as to its delicacy and sensitivity, which characteristics together with the remarkable degree to which they exist, are definitely and emphatically commented upon. The method, therefore, complies in these respects also with the requirements for a standard technic.

IV. FALSE NEGATIVE REACTIONS WITH KOLMER'S TESTS.—Attention has already been called to the fact that it will never be possible to devise a method of complement fixation in syphilis which will invariably and infallibly detect all cases of the disease. There will always be an unknown number of cases in which false negative reactions will be obtained on a single test due to the fact that reagin is present in amounts too small to be detected within the limits of even an exceptionally delicate technic and to the further fact that in latent and quiescent cases where tissue reaction is practically nil, reagin may be absent. The very fact that a small number of falsely negative reactions does occur with Kolmer's technic is an efficient rebuttal of the fear that the test might be even too delicate. The practical absence of reagin, or at least its absence in detectable amounts, is not, however, the only reason for the occurrence of false negative reactions in any technic using an anti-human hemolytic system. There remains to be considered the possible effect of the natural hemodysins present in the tested serum. Kolmer states this to be practically negligible in his method and, certainly, much of the possible effect of the natural hemolysins is evaded by reading the test within a short time after the completion of the secondary incubation.

In view of the practically absolute specificity of the Kolmer test and, therefore, of the definite significance to be attached to positive reactions obtained with it, it becomes of interest and importance to consider the incidence of false negative reactions due to the presence of natural antisheep hemolysins in the tested serum and to determine if the

delicacy of the test is sufficiently increased by the prior absorption of the natural hemolysins to warrant this addition to the technic. Kolmer, in his original communication, called attention to the fact that occasionally a positive serum may show a lesser degree of fixation in the first tube carrying 0.1 c.c. of serum than in the second and subsequent tubes carrying 0.5 c.c. and less, and notes that this may be due to some unknown constituent of the serum which, while acting in a manner similar to a hemolysin, is not absorbed by the addition of sheep cells and may be present in serums which were hemolysin-free and when an antihuman system was used. In a study of the relation of the natural antisheep hemolysins to the production of these anomalous reactions in the first tube of the quantitative test, I have shown<sup>(19)</sup> that while the phenomenon undoubtedly occurs in hemolysin-free sera, this is infrequent, and that the most usual cause is the presence of relatively large amounts of anti-sheep hemolysin in the tested serum.

I have also recently reported upon the influence of natural anti-sheep hemolysins upon the production of false negative reactions with Kolmer's method.<sup>(20)</sup> In a series of 300 duplicate tests it was found that approximately 10% of weakly reacting positive sera gave false negative reactions before the removal by absorption of their natural hemolysins. In view of the specificity of the positive reactions, therefore, absorption of hemolysins prior to the test will in all probability be incorporated as a part of the technic.

V. AGREEMENT WITH THE CLINICAL FINDINGS.—The conformity of the Kolmer test to this clinical requirement in high degree is specifically commented upon by many workers and it is fair to state that in this respect the method again surpasses all others.

It may be mentioned, however, that occasionally unexpected positive reactions will be obtained in cases in which clinical evidence may be lacking or unobtainable. In such circumstances, in view of the proven attributes of the test, the fallibility of clinical evidence must be borne in mind; the fact that it is related to the skill and experience of the clinical observer, and the further fact that it is dependent upon the activity and not the mere presence of the infection with the subsequent production of visible sequels are all significant. Furthermore, in those cases clinically asymptomatic after treatment but which remain consistently serologically positive, the so-called "Wassermann-fast cases", it must be remembered that such cases are really better thought of as "syphilis-fast" and that, as a rule, visceral or neurologic foci exist which are responsible for the persistent positive complement fixation tests.

It may be taken as an accepted fact that a case positive to the Kolmer test is a case of syphilis requiring treatment, remembering, also, that there is no rule without its exception; as in the aged or infirm asymptomatic syphilitic, for example.

VI. SUITABILITY FOR MEASURING THE EFFECTS OF THERAPEUSIS.

—One of the most important factors in the successful management of syphilis is to remember the essential importance and necessity for adjusting the treatment, not to the disease but to the patient. Bearing in mind the importance of persistence in treatment and the peculiar psychology of the syphilitic under treatment, the vast advantages of the quantitative factor in Kolmer's test as rendering graphically visible to the patient even minor grades of serologic improvement and so encouraging him in the continuation of treatment has been noted elsewhere.<sup>(21)</sup>

Attention has also been called to the adaptability of the Kolmer test to graphic reports and their value as a means of recording response to therapeusis, whether clinical or experimental.<sup>(22)</sup>

### **Adverse Reports by Investigators of the Kolmer Test In This Series.**

There were no adverse reports in conclusions in the series under consideration, which comprises all the reports of investigations of the Kolmer test which have been made to date, all workers agreeing that the method was sensitive, reliable, did not give false positive reactions, and but few anticomplementary reactions, and that there was a high percentage of agreement with the clinical findings. The majority of workers adopted it upon the conclusion of their investigations, in preference to the method with which it had been compared. Some few stated that they would use it together with their routine method for a while longer; the results reported by such workers, however, are such as to lead to the inference that their postponement of unequivocal adoption of the Kolmer test might possibly have been influenced more by a reluctance to cast aside a long-tried method, rather than by any doubt of the generally superior qualifications of the Kolmer method.

There are only 2 definite criticisms and these voiced but by a few observers: (1) The occurrence of a definite number of false negative reactions due to the presence of natural hemolysins; and, (2) the fact that the Kolmer method requires more time, more tubes, and a little more labor on the part of the serologist. The first of these objections, in spite of the fact that even with the false negative reactions, the Kolmer technic is still definitely more delicate than the majority of technics, is valid and demands study and consideration as has already been referred to. It is difficult to believe, however, that any clinician or any serologist would urge as a valid objection to the adoption of a superior, efficient, and specific test the fact that it was a little more time-consuming or a little more laborious. It is much more likely and easier to believe that this objection is really an indirect expression of a reluctance to cast aside a familiar technic for a new method; certainly an objection based upon such grounds would be difficult and embarrassing to uphold and defend.



## CONCLUSIONS.

A critical comparison of Kolmer's complement fixation test for syphilis in 88,357 tests by various workers conclusively demonstrates its specificity, sensitivity, freedom from false positive reactions and from anticomplementary reactions and its general superiority and suitability as a standard test for general adoption.

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## A GENERAL REVIEW OF THE FIELD OF PLASTIC SURGERY.

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As early as 1910, with nothing in mind but the cases which call for treatment in civil life, the need for special development in the field of plastic surgery was already beginning to be recognized by leaders in the surgical profession. We sometimes allow ourselves to think that this interest started with the war. True, the war did compel the elaboration of a definite technic in plastic surgery, but it is important to realize that, years after the war is over, there is still an almost infinite number of cases, taking origin in civil conditions, which call for this order of treatment. And it is to the credit of the surgical profession that long before the war, men working patiently and in many instances not receiving much attention had devised most of the procedures upon which we at present rely.

There were some notable evidences of interest on the part of European surgeons in the years just before 1910. Nelaton and Ombredanne published their "Rhinoplasty" in 1907. De Page's "Reparative Surgery of the Face" appeared in 1905. In the same period Jacques Joseph was developing his clinic for plastic surgery in Berlin. Back of these, again, were experimenters like Graefe, Dieffenbach, Langenbeck, and a score or more of others. As far back as 1867 Szymanowski, in Russia, saw the situation as we see it now, and set about standardizing the procedures. And then, of course, there were the men whose names have adhered to the processes they invented, among others, Thiersch, Wolfe, Riverdin and Tagliacozzi.

The point to emphasize is that these men were seeking the remedy for conditions existing in civil life, just as we are now. The war hospitals were the scene of great advances in the technic of operation. They demonstrated, under the severest tests, the soundness of principles that before had been merely asserted. Keegan, for example, half a century earlier, had demonstrated the necessity for a lining in the repair of the nose, but Keegan's observation had gone almost unnoticed. In the war hospital, it was found that he was right, and the principle was accepted once for all. The art of repair and replacement of the eyelids came to full growth in the war hospitals, if indeed it did not begin there.

If we were to consider only what is being done in regard to burns, the new era would be sufficiently noteworthy to command admiration. Formerly, burns were either left without attempt at repair, or the repair was attempted by well-meaning surgeons unfamiliar with the peculiarities of skin flaps, with results too often unsatisfactory. The general rule was to allow the cicatrices to form before a remedy was considered,

and then, in most instances, remedial effort was not considered likely to be successful. As the case stands now, it is practicable, and preferable, immediately after the patient has recovered from the attendant shock, to clear up the burned areas without waiting for contractures to form, and to replace the burned skin by full-thickness skin transferred by means of pedicle flaps or Wolfe grafts, as circumstances dictate. Up to the present, the pedicle flap offers the more dependable method, but with enlarged experience, improvement in technical methods and concentration upon the problem by numerous operators, Wolfe graft transplantation is proving successful in an increasingly higher percentage of instances. The Wolfe graft is available for the same wide range of defects as the pedicle flap, and if some surgeons are now able to count upon 70% of successful takes, it will not be long before a still higher average of success will be attained. When there are so many defects, up to and including those produced by cancer excisions, whose covering is one of the problems in the work of every surgeon, the significance of this advance is self evident.

It is well to stress the warning that the materials used should be from the body of the patient. One might be tempted to argue that skin is skin and that like methods will produce like results. It is not so simple as all that. Each body seems to be adapted to a life scheme of its own. Thiersch grafts from another body have been known to present the appearance of perfect adaptation at the time they were applied, and to remain so for 3 or 4 weeks, and then, suddenly, for no cause that can be confidently assigned, they shriveled up and died. A slight change in body temperature may determine such a result, and the foreign graft may even produce a temperature which passes when it is removed. Possibly a difference in the amount of protein poisons present may have something to do with it. At any rate there is conflict of some kind, and the graft dies. As a rule, on the other hand, the regular Thiersch graft is as dependable, as reliable, as anything in surgery.

Eyelid surgery is essentially a war product. In 1917, Esser, formerly of Holland but now of Russia, asserted in the *Annals of Surgery* that ectropions or entropions could be repaired by use of the Thiersch method. At Sidcup, the Thiersch graft was very quickly taken up and as quickly abandoned for the Wolfe, and a method was evolved which gives uniformly reliable results. Nowadays, one does not hesitate to lift the skin from a sound eyelid to repair the other eyelid, if only one is affected. The elasticity of the skin is so great that the sound eyelid quickly effects its own repair after the edges have been joined.

New methods are profoundly influencing the treatment of hare-lip, and of cleft palate. Something better, and more highly endowed with the capacity for final success, has been introduced into the procedures since attention has been given to the aid to be derived from plastic methods.



The Thiersch graft is being used to replace the mucous membrane of the antrum; to replace lost buccal membrane; as a substitute after removal of epipharyngeal fibroses and adhesions; for relief of trismus, where that condition is due to loss of mucous membrane; to epithelize the tonsil sulcus; to repair the cul-de-sac of the eye, and to replace the mucous lining of the nostrils.

As for the correction of nasal deformities, it can be affirmed without hesitation that we have developed and standardized a well defined, reliable system. The records of hundreds of cases at the Post-Graduate Hospital make this statement incontrovertible. In cases of nasal deformity which also call for resection of the septum, instead of having 2 operations, as formerly, one for resection of the septum and another for correction of deformity, we now do it all at one time and send the patient home in 48 hours. We have discarded the rule that deformities in the noses of children should be left until, at about 13 years, the vomer has obtained its growth. If the airway is blocked by the septum (not the turbinates) the vomer has no chance for normal development; once the pressure is released it does develop, normally and rapidly. If the vomer itself is an obstruction in these cases, we do not hesitate to remove it in such part as may be necessary.

The existence of facilities for prompt treatment has altered the viewpoint about recent injuries. They ought to be dealt with at once, and nowadays they can be. There is no longer much excuse for allowing the injured parts to set in wrong relations. Neither is the case hopeless for the victim of syphilitic facial disfigurement. These cases were once the despair of the surgical profession, but now the balance between success and failure has been found to turn upon the provision or the nonprovision of a lining in substitution for the mucous membrane that had been destroyed. Working from the recognition of this essential preliminary, methods have been evolved and perfected by whose employment every condition presented by syphilitic lesions in the nose region can now be dealt with in full confidence of final success.

Some great reputations were made in the war period, and the men who made them have transferred their activities to the civil field. In England, Gillies, whose name is identified with the achievements of Sidcup, has continued to devote himself to the work, as have several of the more noteworthy of his colleagues, like Kilner and Pickerill. At Vichy, in France, Lemaitre set new records of success in plastic repair of the jaw. He is now devoting himself to securing for plastic surgery its proper place in the hospitals of Paris, in which effort he has the whole-hearted support of the government of France. Esser, in Russia, Luxemberger in Germany, Von Ertl in Vienna, Imbré in Hungary, Alessandri in Italy, are a few of the outstanding leaders in their several national environments who are laying the foundations for the new development.

In America the beginnings have been made in a movement the inevitable result of which will be that every hospital will have its plastic surgery department. Staige Davis is so engaged at Johns Hopkins; Kazanjian is professor of military plastic surgery at Harvard; Ivy at Pennsylvania; Blair at St. Louis; Ferris Smith at Grand Rapids; New at the Mayo Institute; all are established in positions from which they can definitely influence the recognition of modern plastic methods. Progress in the development of plastic clinics in the hospitals has been rapid, but there is room still for some acceleration. Hospital organizations are conservative, but they must come to this.

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### DR. COIT AND HIS IDEALS.

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E. G. WHERRY, M.D.,

Newark, N. J.

(An address to the American Association of Medical Milk Commissions)

I feel signally honored in appearing before this Association as the representative of the Essex County Medical Milk Commission, the first commission of its kind to be organized, for the production of Certified Milk. Under the circumstances I feel sure that you will agree with me that I could choose no more appropriate subject for my address than "Dr. Coit and His Ideals". Yet, what can be said about Dr. Coit? To those of us who were so fortunate as to have known him it is not necessary to say anything. To you who did not know him, the brief biographic sketch of his life which time might permit, would be inadequate to convey even a fleeting and elementary impression of what manner of man he was. If I may be permitted to paraphrase, I shall say simply: "By his works ye shall know him".

On December 5, 1892, before the Practitioner's Club of Newark, Dr. Coit first outlined a plan for the production of "Certified Milk". This original plan included chemical, bacteriologic and veterinary standards, medical supervision of dairy hygiene, and health of employees. These objects were to be obtained by means of a rigid contract between the dairymen and a commission composed of physicians to be known as the Essex County Medical Milk Commission. After 32 years of operation, this plan remains unchanged in all of its essential features. The idea of the Medical Milk Commission, originated by Dr. Coit, has spread until now there are more than 80 commissions in the United States and Canada, besides others in Europe.

As a sequel to the local medical milk commission, the American Association of Medical Milk Commissions was formed in 1907, Dr. Coit being elected president the first 2 years of its existence.

In 1909, Dr. Coit wrote, and was instrumental in procuring the enactment of, a New Jersey State law defining and safe-guarding the term "certified milk". The original contract between the commission and the dairymen, as drawn up by Dr. Coit, contained rules and regulations governing the location of the lands, the construction of buildings, the quality of the water supply, the location of wells, the surroundings of the buildings, the housing and care of the cows, including their feeding, the cleansing of the cows and the barns, the collecting and handling of the milk, the cooling and iceing, the preparation and shipment, the transportation and delivery, the methods of milking, and the health and personal cleanliness of the employees, so as to produce milk according to the following standards of purity formulated by himself: (1) An absence of large numbers of microorganisms and the entire freedom of the milk from pathogenic varieties. (2) Unvarying resistance to early fermentative changes in the milk, so that it may be kept under ordinary conditions without extraordinary care. (3) A constant nutritive value of known chemical composition and a uniform relation between the percentage constituents of fat, proteid and carbohydrate.

Your time should not be taken up with the consideration of unnecessary details concerning methods, with which you are doubtless sufficiently familiar, so, I shall content myself by emphasizing a few points which possibly are sometimes overlooked and which Dr. Coit considered of the utmost importance.

(1) Personal inspections of the dairy by the members of the commission themselves. A by-law in our contract provides that no certificate shall be issued unless a member of the commission shall have visited the dairy and shall have given it as his judgment that the provisions of the contract between the commission and the dairymen are being fulfilled.

(2) That "certified milk" should be not more than 3 hours old when bottled nor more than 24 hours old when delivered. As a matter of fact, certified milk produced under the supervision of this commission has been for years cooled and bottled in from 6 to 8 minutes from the time it left the cow, and was not more than 15 hours old when delivered.

(3) Some plants, today, keep the morning milk in a holding tank, until the afternoon milking is completed, in order to save labor and money. Dr. Coit's Argeement, Section 45, requires that "certified milk shall be packed in flint glass quart jars, immediately after it is cooled."

(4) This agreement further requires: That the samples taken to the laboratories for examination shall be collected from delivery wagons en route, in unopened, original sealed packages, placed in properly iced containers bearing the seal of the commission, dated and autographed by the secretary, and sealed against inspection under the personal direction of the commission. The samples to be collected and the



containers to be delivered to the laboratories by messengers, selected by and in the immediate employ of the commission.

(5) That the standards of certified milk should be so conscientiously carried out by each commission, that "certified milk" shall be the same and equally reliable in all places, whether produced in Berkeley, California, or Boston, Massachusetts.

(6) The provision for medical examination of employees and the authority of the Committee on Sanitation, to act in cases of emergency, in the event of any illness of a suspicious nature that might jeopardize the safety of the milk, Dr. Coit regarded as fundamental.

(7) In the Medical Milk Commission Law adopted by the State of New Jersey, members of the commission are enjoined from receiving any salary or emolument or any compensation of any kind, or character, for any services rendered in the production of "certified milk" and a penalty of a fine is fixed for any violation of this provision and in addition, the offender shall be removed from his office as a member of the commission forever and disqualified from becoming a member of any commission incorporated under the provisions of the Medical Milk Commission Law.

These are the sections of our rules and regulations, which our secretary, Dr. Floy McEwen, brought to my attention as particularly distinguishing Dr. Coit's work, and all of them are being carried out faithfully at the present day. I am sorry that the misfortune of poor health prevents Dr. McEwen from being here to represent the Essex County Medical Milk Commission, for since Dr. Coit's death, he has been the brains and soul of our commission, devoting his time unsparingly to the cause of certified milk and by his courage and cheerful optimism inspiring the faith and the morale of all those associated with him.

Like most men who accomplish great things, Dr. Coit devoted the best years of his life to a single purpose; driving straight ahead, he never wavered, never accepted defeat, but exerted all the strength of his dominating personality to accomplish his object. As the originator of "certified milk" he stands with the group of immortals—with Jenner and Pasteur, with Lister and Morton. It will never be possible to estimate the benefit to humanity due to his accomplishments. Dr. Coit thought that unswerving loyalty to the highest ideals was essential in maintaining the full value and usefulness of certified milk and was always alert and prompt in acting to prevent the lowering of standards, as shown by the following excerpt from an address which he felt it a regretful necessity to deliver:

"A Medical Milk Commission which fails to carry out any one or more of the essential parts of the system does not represent the system. The product which such commissions permit to be called 'certified' represents a serious menace to the certified milk system. Such certification establishes a false security in the minds of physicians and the public who

have learned to trust the system and the name. Such certification savors of deception and, as respects the milk itself, is a misbranding and falsification. The work of such a commission is a detriment to the cause of certified milk and reflects upon the reputation and diminishes the influence of the American Association of Medical Milk Commissions. A few such commissions have unfortunately gained admission to our Association. No chain is stronger than its weakest link, and any commission which weakens the strength of this national chain should not be tolerated as a factor in the government of legislation of the Association."

It is impossible to give, in the time allotted to me, an appreciation of Dr. Coit. It cannot be expressed by saying that he was a good man, nor by saying that he was a great man. He was both good and great. He was gentle, kind and strong. He was indomitable and exacting, yet patient and considerate. He had great will power, steadfastness of purpose and perseverance. He was both a visionary and a doer of deeds. He saw visions and dreamed dreams, and after long years of persistent and patient effort his visions are realities, his dreams have come true. He worked alone to accomplish his great tasks, and while working helped others to accomplish their tasks. He had a large brain and a big heart. He had faith in his ideals, hope in their accomplishment, and was charitable in his discouragements. He was courageous, upright and noble, and inspired these qualities in others. Members of the Essex County Medical Milk Commission are glad of this opportunity to acknowledge our debt to him. He was a loyal and a true friend. To us he was more than "only a signal shown" and more than "a distant voice in the darkness". His memory is an inspiration. His good deeds are an example. His humanitarian and altruistic spirit still lives. His influence is immortal. He has left this as a perpetual heritage.

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### **TREATMENT OF RHUS DERMATITIS WITH POISON IVY EXTRACT.\***

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RALPH OAKLEY CLOCK, M.D., F.A.C.P.,  
Pearl River, N. Y.

Poison ivy infests practically all parts of the country, except mountain elevations above 6000 feet and arid lands. It is found in fields, pastures, woodlands and thickets, along roadways and streams, often also in city parks and suburbs, sometimes mixed with other shrubbery.

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\*Read at the One Hundred and Fifty-ninth Annual Meeting of the Medical Society of New Jersey, held at Atlantic City, June 18, 1925.

## SUSCEPTIBILITY.

Everybody is to some degree susceptible to poison ivy, although it has long been a matter of observation that certain persons possess a marked degree of resistance to the action of *Rhus* toxin. Interesting experiments on the variation in susceptibility to poison ivy were carried out by Brown<sup>1</sup> on a series of more than 100 cases. He found no evidence which would suggest such a condition as absolute nonsusceptibility. The so-called immunity of certain persons is one of degree only; that is, the immunity is relative and not absolute.

## ETIOLOGY.

There seems to be little foundation for the statement that persons may develop *Rhus* dermatitis by merely walking past the plant. The investigations of Sweet and Grant<sup>2</sup> have shown that *Rhus* dermatitis occurs from actual contact with the resinous sap of the plant. This contact may result through an intermediary agent which carries the sap, such as particles of soot in smoke from the burning plants; as well as clothing, shoes and other articles long after contact with the plant. Plants retain their poisonous property even long after drying, and injury from old herbarium species is not uncommon.

## PROPHYLAXIS.

One of the surest and best methods of individual prophylaxis is the use of soap and hot water. It has been found that the *Rhus* poison, after being deposited upon the skin, requires a certain time for penetration; and if this penetration can be prevented, irritation and the resulting eruption will not occur.

## TREATMENT WITH EXTRACTS.

Many attempts have been made to isolate the active principle of poison ivy, the first effort in that direction having been made by Van Mons<sup>3</sup> in 1797; and in 1866 Maisch<sup>4</sup> isolated a volatile substance which was shown to be inert. It is now generally agreed<sup>5</sup> that the active principle is a nonvolatile resin.

In 1918, the work of Strickler<sup>6</sup> established a scientific basis for the treatment of *Rhus* dermatitis by injections of extracts of poison ivy. Since then, many cases have been reported by Alderson<sup>7</sup>, Sayer<sup>8</sup>, Strickler<sup>9</sup>, Bivings<sup>10</sup>, Williams and MacGregor<sup>11</sup> who obtained clinical cures with an alcoholic extract injected intramuscularly. Many patients have complained, however, that injection of the alcoholic extract caused severe pain. Undoubtedly, this pain was due to the high percentage of alcohol used to hold the active principle in solution.

## ALMOND OIL EXTRACT.

Our laboratory studies, which have been carried out during the past three years on the subject of poison ivy (*Rhus toxicodendron*), have included the problem of supplying the active principle in correct



therapeutic dosage in a solution that would permit of its being injected without the pain caused by the alcohol. As a result of these investigations, a solution of the *purified active principle in almond oil* has been prepared as follows:

#### PREPARATION.

The acetone extract of mature, poison ivy leaves (*Rhus toxicodendron*) is decolorized and purified with charcoal. The oil-soluble active principle is separated by petroleum ether from the water-soluble inert substances, freed from the ether by evaporation in vacuo, and redissolved in acetone. This acetone solution of purified active principle of *Rhus toxicodendron* is assayed and added to sterile U. S. P. almond oil in such proportions that the finished product contains 1% poison ivy extract.

#### LABORATORY TESTS.

Repeated tests of this product on laboratory animals have shown it to be nontoxic, and clinical trials have demonstrated its efficiency. This extract possesses the advantage of being nonirritating and its injection, therefore, does not cause severe reaction or pain. Moreover, since the oil is slowly absorbed from the tissues, a larger amount of the active principle can be used in each dose. Immunologic tests indicate that this almond oil extract is more potent than any extract of poison ivy that has thus far been prepared.

#### CAUTION.

Care should be exercised when injecting the almond oil extract of poison ivy for, if the extract is inadvertently dropped on the skin, it may cause typical *Rhus* dermatitis. In order to guard against this possibility and, at the same time, to relieve the physician of the necessity for cleansing his own syringe, the almond oil extract is furnished in syringes which may be destroyed after use. When stored in a cool place, the oily base becomes more viscid, thus making it difficult to inject the extract through the needle. For this reason, it is important to warm the extract (not above body temperature) before using.

#### DOSAGE AND ADMINISTRATION.

As a rule, one injection of 1 c.c. of the almond oil extract will be found to give relief. In severe cases, 2 or 3 doses may be required at intervals of 24 hours. Usually the subjective symptoms of itching are relieved in 12 to 24 hours after the first dose, and local reactions are absent. When administering the almond oil extract, it is important to make all injections intramuscularly and not subcutaneously. The best location for the injection is in the deltoid muscle, just below the point of the shoulder.

#### LOCAL TREATMENT.

McNair<sup>12</sup> made a most comprehensive study of the value of some 300 drugs and chemicals used as local remedies for ivy poisoning, and

suggests that theoretically it should be possible and beneficial to remove that portion of the poison that has not penetrated or combined with the skin by the use of a solvent and precipitant combined, such as 2% alcoholic solution of lead acetate. But he prefers for local application a 5% solution of ferric chloride which, however, is objectionable because of its staining properties. Nevertheless, any local treatment, even at its best, is relatively ineffective when compared to the results that have been obtained by the intramuscular injection of the almond oil extract of poison ivy.

#### CLINICAL REPORTS.

In this paper, no attempt has been made to incorporate detailed clinical histories or reports. At this time, it seems sufficient to submit excerpts from the clinical reports received from dermatologists and general practitioners in a few states. These reports indicate clearly the general trend of the clinical results which are being secured with the almond oil extract.

New York: "Prompt and complete cessation of itching within 6 to 12 hours after first dose".

New Jersey: "Face and hands involved. Two doses given. No improvement after first dose, but condition was arrested. Improvement prompt after second dose. No local reaction occurred from either dose. This case was one of extreme susceptibility to poison ivy. Last year the patient was given 3 injections of a poison ivy extract in alcoholic solution for treatment. Was benefited at that time, but painful local reactions followed and patient did not want injections this year until assured that injections of poison ivy extract in almond oil would not cause so severe pain. Patient was very much pleased with contrast in local reactions of injections."

Virginia: "Two doses given. Improvement followed first dose. No local reaction. Patient entirely satisfied and relieved."

Georgia: "I did considerable work with poison ivy extracts 2 years ago. I suppose you have seen the results of the work which were published. They were very satisfactory except for the fact that the treatment proved somewhat objectionable to the patient on account of the severe reactions and the pain on administration. I thank you for the package and will be glad to give it (poison ivy extract in almond oil) a trial when the season opens. I had occasion last week to use a little of it. The patient had practically no local reaction which is a decided improvement over the preparation I have used before."

Alabama: "I will say that I find the poison ivy extract in almond oil far less irritating than the antigen preparation (alcoholic extract) which I have heretofore been using, and I have found your preparation to come up to the fullest expectations. In each case I have stated to the patient that within 24 hours after first dose they could notice that

the itching, etc., would stop, though the course would be from 2 to 3 doses 24 hours apart. They have voluntarily stated that the first dose acted as specifically as stated to them."

#### SUMMARY AND CONCLUSIONS.

- (1) All persons are susceptible in some degree to poison ivy.
- (2) Actual contact with the sap of the plant is necessary to produce *Rhus dermatitis*, but such contact may result through some intermediary agent which carries the sap.
- (3) Alcoholic extracts of poison ivy cause painful local reactions, which are undoubtedly due to the high percentage of alcohol used to hold the active principle in solution.
- (4) Poison ivy extract in almond oil contains the purified active principle of *Rhus toxicodendron*, freed from coloring matter and inert water-soluble substances.
- (5) Laboratory tests have shown that the almond oil extract is nontoxic and more potent than any other extract of poison ivy thus far prepared.
- (6) Poison ivy extract in almond oil can be injected without pain or local reaction. It should be administered *intramuscularly*, preferably in the deltoid muscle just below the point of the shoulder.
- (7) Clinical reports from several states indicate that prompt relief usually follows in 12 to 24 hours after the first dose of poison ivy extract in almond oil. Severe cases require 2 or 3 doses.

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## DISCUSSION.

**Dr. Charles H. Purdy:** Dr. Clock's paper is a very interesting one, and I think he deserves a great deal of credit for coming before a Medical Society with the first paper that I recollect in years, treating of a botanical substance in the cure or treatment of disease. If this had been something like a new operation for liver or kidney disease, we might not have been surprised, but this going into pure therapeutics is rather a new thing to this Society.

I would much rather have gotten up a year from now to discuss this paper. This preparation is a comparatively new one. The dermatologists for a great many years have used some extract of rhus, years ago orally, and within a few years past alcoholic extracts following the reports of Dr. Strickland. We have to admit that there is certainly something in this.

I can't understand how it is that we can get so quick a desensitization, in from 12 to 24 hours, when an agent applied to the skin will produce very much the same results as we would find in the use of oil of sinapis or some other irritating substance. I can see, however, very readily how we can build up, by minute doses, a tolerance in those who are susceptible, and all of us who have seen a great deal of poison ivy know that it isn't a laughing matter by any means; the person who is subject to the dermatitis is certainly in a rather deplorable condition for several days. If we can shorten that period by prophylactic treatment, I think that this new method—if we wish to call it so—will have accomplished a great deal.

**Dr. Henry G. Smith:** I will report on 2 cases. The first was one which occurred just a month ago, with considerable infection over the hands, wrists and face. I injected 1 c.c., and on the following day there was less itching and burning. I gave another injection, and within 4 days the rash had practically disappeared. Two weeks ago today, following a little exposure, I developed it myself on the arms, and took 1 c.c. injection. The first injection was given into the deltoid. Considerable pain and restlessness occurred in the case of the patient; he complained he could not sleep the first night, but it subsided within about 3 days. My own injection was given under the scapula, subcutaneous, and a severe reaction followed, which has not yet completely subsided. The itching and pain in my arms was completely removed within 18 hours and I have had none since.

**Dr. Otto Lowy:** I certainly am very glad to have heard Dr. Clock's paper. The poison ivy situation is a rather serious one to the patient, for the time being, and almost drives the doctor crazy, if we all remember.

I should like to ask—and I don't know whether it is pertinent to ask here—what company prepares this extract and where it can be obtained?

**Dr. Clock,** closing discussion: Dr. Purdy mentioned extracts given by mouth. The almond oil extract contains so much of the active principle, that supplementary treatment by mouth is not required. With the alcoholic extract, however, the tincture was an essential adjunct. The case which Dr. Smith mentioned merely serves to emphasize the point that I tried to lay considerable stress upon, namely, the importance of intramuscular injection. If the almond oil extract is injected subcutaneously, it is absorbed very, very slowly, and will cause temporary local discomfort.

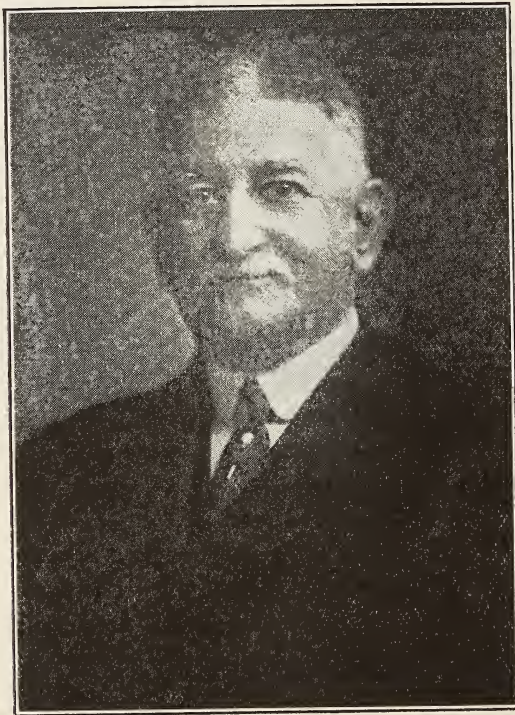
Rhus dermatitis is apparently a true allergic phenomenon; some persons are more susceptible to it than others, and in such hypersensitive persons only a small amount of the poisonous sap is required to produce dermatitis. In those who are less sensitive or who possess some degree of immunity, the dermatitis does not occur unless some of the sap has actually come in contact with the skin.

I should be very glad to tell Dr. Lowy the name of the manufacturer after the meeting. It is manufactured by a biological house in New York.

## Deaths.

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JOHNSON, Walter Buckley, of 382 Van Houten Street, Bayonne, New Jersey, died suddenly, in his 70th year, while engaged in playing a game of golf with three other physicians. Dr. Johnson had complained on the way to the golf course of some discomfort in the region of his heart but felt no great anxiety about it and proceeded to play in his usual vigorous and concentrated manner. Just after his drive from the 17th tee, he complained of feeling dizzy and his compan-



WALTER BUCKLEY JOHNSON, M.D.

ions rushed to his aid but were unable to afford any relief and he passed away in a few moments.

Born in Paterson, New Jersey, January 3, 1852, the deceased received his preliminary education in that city and graduated in medicine from the College of Physicians and Surgeons of New York in 1878. For several years thereafter, he was an assistant-surgeon at the Manhattan Eye and Ear Hospital in New York City and then took up his

work as a specialist in Paterson. He became not only a recognized leader in the profession and in his specialty but one of the best known public spirited citizens of northern New Jersey. Entirely outside the ordinary activities of his profession, he was for many years devoted to work for the alleviation of suffering of the more unfortunate and he was a splendid organizer and executive. It was through his efforts that the Paterson Eye and Ear Infirmary was established many years ago and built up into one of the best institutions of its kind in this state. He was also an indefatigable worker in the interest of the Paterson General Hospital and for many years had been the executive head in the campaign for funds to provide for the building and maintenance of that institution. During the world war he was active in organizing the volunteer medical service of New Jersey and in the American Red Cross organization work and campaign.

Dr. Johnson was one of the leading ophthalmologists and otologists of the country and was a member of all the important national organizations dealing with those specialties, in addition to being a leader in the Passaic County Medical Society, the New Jersey State Medical Society and the American Medical Association. In the State Medical Society, he had been honored by election to the presidency and for a number of years past had served faithfully as a Trustee and as Chairman of some of its most important committees. A man of unquestioned integrity and of inexhaustible energy, his counsel and active assistance were constantly sought by the officers of the Society and he could always be relied upon to render aid.

The funeral services were conducted from the church of the Redeemer, of which for many years he had been an active member, on the afternoon of August 1, and the Board of Trustees of the New Jersey State Medical Society, the members of the Passaic County Medical Society, and the physicians and nurses from the Paterson Eye and Ear Infirmary and the Paterson General Hospital attended in a body.

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HARVEY, Henry T., of No. 2 Morris Avenue, Atlantic City, died suddenly of cardiac failure following acute gastritis, July 30, 1925.

The son of a lawyer, Dr. Henry Thomas Harvey, was born in Lock Haven, Clinton County, Pa., on July 12, 1882, of Henry Thomas Harvey and Sarah Pollock, the former of whom died in 1902 and the latter in 1922.

Receiving the benefits of a public school education of his home town, the future Dr. Harvey prepared for his collegiate career in the State Normal School of Lock Haven, later entering Bucknell University, where he was graduated with the degree of F.H.B. in the class of 1902.



Almost immediately after leaving college, Dr. Harvey accepted a position as chemist at the plant of the New York and Pennsylvania Paper Company, at Lock Haven, where he spent two years in that interesting profession. On the termination of that employment Dr. Harvey matriculated in the University of Pennsylvania, taking the medical course and graduating with the degree of M. D. in 1908. This was succeeded by one year's internship at St. Timothy's Hospital, Roxborough, Philadelphia, after which he came to Atlantic City, in the fall of 1909, and settled down into the general practice of internal medicine.

Dr. Harvey had been pathologist at the Atlantic City Hospital since 1912, and had charge of all the laboratory work at that institution. He was married on September 27, 1913, to Mrs. William N. Shedaker, nee Miss Edith Burch, of Glen Falls, N. Y. No children were born of this union. He was a member of and president, for the term of two years, of the Atlantic County Medical Society. He was also chief medical inspector, for a number of years, of the Atlantic City public schools.

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MOORE, Mrs., wife of Dr. John H. Moore, died at her home on West Commerce Street, Bridgeton, on July 9, 1925, from exhaustion after years of suffering.

Two weeks ago Mrs. Moore collapsed from the excessive heat and it was thought at that time she would not rally. When the second attack came, the weakened vitality did not respond and she slowly sank into rest.

Mrs. Moore will be remembered by the older generation as Mrs. J. Allen Maxwell, widow of the Rev. J. Allen Maxwell, at one time pastor of the First Presbyterian Church.

Mrs. Moore was an active member of the church and was also identified with the Bridgeton Library Association in which she took a keen interest. She was principal of Ivy Hall, one of the best known schools for girls in the East, from 1891 to 1900. In 1900 she and Dr. John Moore were married, at which time she severed her connection with the school.

Mrs. Moore is survived by Dr. Moore and three step-children, Miss Grace Maxwell, Mrs. Howard Jones, Newfield, N. J., and Rev. Irving Maxwell, pastor of the Westminster Presbyterian Church, Camden.

(Continued on page 365.)

# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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NOTE.—The transaction of business will be expedited, and prompt attention secured if—

All papers, news items, reports for publication and any matters of medical or scientific interest, are sent direct to THE EDITOR, Atlantic City, N. J.

All communications relating to reprints, subscriptions, extra copies of the JOURNAL, books for review, advertisements, or any matter pertaining to the business management of the JOURNAL are sent direct to THE CHAIRMAN OF THE PUBLICATION COMMITTEE, Newark, N. J.

## WALTER B. JOHNSON.

In the death of Dr. Johnson, the medical profession of New Jersey loses one of its most distinguished members, the State Society one of its most earnest and reliable workers, and the community one of its most beloved and most worthy citizens. To those of us who had known him intimately or worked with him closely in one way or another, the personal loss is heavy indeed. A charming companion, an absolutely reliable friend, and a thoroughly honest seeker after the truth always, he endeared himself to all associates.

This society will for a long time greatly miss his wise counsel and guiding influence, but we trust we shall equally long remember his many good works in our interest.

## AVAILABLE POST-GRADUATE STUDY.

The "Transactions of the Annual Meeting" of the State Society, published as a supplement to the August Journal, should be carefully read by every member, especially by those who were so unfortunate as to miss that convention. They contain an immense amount of "food for thought".

By all means, read the report of the special committee on Trustees on Post-Graduate Medical Courses now made available to county physicians through the proffered coöperation of the University of Pennsylvania. The committee has succeeded in devising a plan whereby any physician or group of physicians may pursue graduate studies at small expense of money or time. It remains to be seen how many will take advantage of the opportunities offered. If you are too distant from Philadelphia to attend the regular courses at the University, you can readily arrange to have the instruction brought to you. By action

through the County Society, or by forming a group in your own town, show your interest in this matter and lead your associates to make use of the privileges that are now made possible.

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### MUSIC FOR RECREATION AND DIVERSION.

In the July Journal our column devoted to "Esthetics" dealt with the physicians' orchestra of Newark and called special attention to the opportunity open to other members of the profession to join this organization. We would like here to suggest that similar musical bodies be formed in other towns of this state; not necessarily complete orchestras that require a considerable number of members each, but groups of musicians that can get together frequently and constitute harmonious organizations for the personal benefits to be gained from playing together and, possibly, for the occasional entertainment of their friends. In almost every community there are some physicians who play upon some musical instrument—the piano, cello or violin; would they not derive much greater pleasure from musical association with their confrères, increase their skill in and enjoyment of this prowess through combined action with kindred spirits, and confer great favors upon their friends by releasing such buried talent?

In a report of this year's annual convention of the West Virginia Medical Society, we note the following sentence: "A doctor of this Society, from Mercer County, was not in the least embarrassed to get up and show that he was not a one-track man, by playing on the cello with 2 others, in a trio. We have not heard recently music played any more beautifully by amateurs." Doubtless, there is much talent of this sort scattered through New Jersey; can it not be induced to "come out into the open", and may we not make music a feature of our entertainment at the next Annual Meeting.

In the Journal article by Dr. Harden, the statement was made that the Newark Physicians' Orchestra "is the only one composed entirely of medical men in the United States and the second in the world, according to the J. A. M. A., the other being in Berlin, Germany". The editor knew of another that had started some years ago and upon inquiring learned that one had been organized within the Maryland State Medical Society in 1912, composed of 35 members and had given several musicales for the benefit of the Society and other medical gatherings, but that it disbanded during the World War period.

So far as we are at present advised, then, though ours was not the first in the country nor the second in the world, it is the only existing one in the United States. Let us now do what we can to strengthen the Newark orchestra, and, at the same time try to develop other groups in other Jersey centers.



## Medical Economics

### ENJOYING ONE'S JOB.

"And no one shall work for money and no one shall work for fame—

"But each for the joy of the working, and each in his separate Star

"Shall paint the Things as he sees it for the God of things as they are."

—Kipling.

The country at large is but now lifting itself well out of the slough of despond into which, along with the rest of the world, it sank in the months following the armistic.

The causes of the depression were many; but one factor which played no small part in unsettling men's minds, a definite factor in the unrest of the individuals, keeping them turning from one thing to another, was undoubtedly a lack of interest in the new work at hand—a failure to enjoy what had to be done.

For two years we had been involved in great events. During that period we had reckoned men in terms of millions, food stuffs and supplies by the thousands of tons, ships by the hundreds, money in billions, distances from home—for many of us—by thousands of miles, and in one form or another death, sudden, stark and horrible, an ever present part of the scene. How turn equably and quietly from soul stirring, high tension life of that sort, to the plough shares and humble pursuits of peace?

For those who had stayed at home, the difference was only one of degree. For those who had gone—and returned—the readjustment from war to peace left a distinct feeling of mental turbulence and dissatisfaction. If the old job was waiting, it seemed prose and dull. If a new one was to be sought, none could be found to suit the mind attuned to an exuberant activity where death had played always a large hand in the game.

One secret of much of this discontent was that we were not enjoying our changed occupations, we were dwelling much on the exciting past, dreaming filmy dreams of an uncertain future, and not doing the day's work.

There is too much talk of fitting pegs to their proper holes, as though the human peg were a purely passive article to be fitted by some master workman.

Round pegs to round holes, and square pegs to square ones, by all means; but impress on this human peg, in heaven's name, that it is a creature with the God-giving faculty of choice, and must itself do some of the fitting.

Perhaps a job is not altogether to a man's taste, but the doing of that job well, can be of some pleasure to any man. The task and the doing of it are two different things, and one ought to enjoy doing anything carefully, accurately, neatly, a little better than some one else might do it. There should be pleasure in digging a ditch in true lines and with even sides; in wrapping a package neatly; satisfaction in taking accurately a pulse and temperature and in making a neat, legible record of the results; in completing a careful history and examination with the feeling that one's best effort has gone into that particular bit of work; in other words enjoyment in anything that is workmanlike.

Dissatisfaction with a job as a whole, there may be; but that is no excuse for neglecting any part of it, or for failure to enjoy putting one's best effort into its detail as long as one holds it. Too often careless and slovenly habits of work make for dislike of the work, and thus for needless unhappiness. The difference between happiness and unhappiness, says Maeterlinck: "...is but as between a 'broad and enlightened acceptance of 'life, and a hostile, gloomy submission—'a large harmonious conception of things, 'and one that is stubborn and narrow'."

Furthermore, the failure to like one's work, the inability to bend every energy today to the tasks of today, regretfulness of the past, uneasy fear and doubt of the future—all these are seedlings of that nightmare worry, and there is no cure so apt as to learn to do well the task that lies at hand. Worry is a composite, and much of it is non-constructive thinking, mental effort which gets nowhere. It broods on the past, then flings itself into the future, and the only relation it bears to the present is thoroughly to upset it. It is futile to tell the victim of this unreasonable malady to stop worrying without telling him *how* to stop; and he cannot be told how to stop until he understands the nature of the mental crookedness by which he is obsessed. He may then slowly learn to stop living in the past and the future, and center all his ef-

fort on today. He may then learn that effort to do well what is to be done right now brings real enjoyment. He may then learn that what he had visioned before as a blank impenetrable wall off in the future, without means of going through, or over, or around, or under, will gradually melt away and actually, like mist before the wind, disappear before his steady effort at each present daily task. The worrier has a maximum depression of thought; he must be taught concentration. He is possessed of timorous uncertainty; he must learn decision. He is in constant dread lest he choose the wrong way instead of the right one: he must be shown that the making of a wrong decision is rarely so heinous an offense as making no decision at all.

Another fruitful source of dissatisfaction is the inability to face squarely, unpleasant facts; and indeed before they are to be faced, facts must be clearly recognized. Humanity, especially in its ego-centric moods, loves to exaggerate pleasant truth, and minimize the unpleasant—both processes being carried to the point of distortion and often of untruth.

"The common problem, yours, mine, 'everyones, is—not to fancy what were 'fair in life provided it could be, but, 'finding first what may be, then find how 'to make it fair up to our means; a very 'different thing!"

So the good Bishop Blougram lays down his matter of fact gospel of the day's work. It is not cant. There is no hypocrisy there. It is just hard common sense which physicians need every day to apply to their patients, and above all to preach by practicing it themselves.

Finally the man who does not like what he has to do every day, who but rarely finds real pleasure in his appointed tasks, is never going to stumble on the secret of success. And after all, the secret of success is no secret whatever—it is a mere matter of liking one's job, and bending every energy thereto. It requires no superbrain power. It is the simple giving to the task the best that lies in one at the moment, without the hindrance of past regret or future fear.

"I must see the doctor today. I don't like the look of my wife."

"That's an idea. I'll come with you, old man; I can't bear the sight of mine either."

## Esthetics

This department is enriched this month by a poetic contribution from one of our members whose talent is not unknown to many of you and whose poem is exceptionally opportune in view of the present stir about evolution.

### NOVUM DE PROFUNDIS.

A playful little fish-like cell that swims  
the Seminal Sea  
Remains today just as it was, and this is  
really me  
When I was unicellular, and sported round  
about  
My ancient marine habitat and wished I  
might get out.

For ages did I live therein; I was a rest-  
less thing;  
I concentrated even then, one future leg  
and wing,  
And since those days, I have been told, in  
time we have each wish;  
So living long with higher aims, I ceased  
to be a fish.

One fateful day I popped my nucleus up  
from the river silt  
And saw another nucleus, quite similarly  
built;  
This thing was new and strange to me; it  
laid there in the sun;  
Instinctively I crept to it and touched it—  
we were One.

This act bore love, unknown to me; then  
came the urge to part;  
I speak in ages, eons in fact, for naught  
is there upstart  
In nature's plans; ten million years I've  
learned, are as a day.  
Mitosis, wished for, came to me and I have  
grown that way.

This was the first calamity the ages brought  
on us.  
All that has followed since that time is  
painful to discuss;  
But 'twas my own, this foolish wish, that  
caused me to divide,—  
It ushered death into the world, and every  
ill beside.

For know, mitosis sowed the seed that has  
become divorce;  
It has evolved from that dark day and fill-  
ed me with remorse.



From cell division dates all pain and evil  
found in man,  
The wicked outcome of a wish I made  
when I began.

The Biblical description where God formed  
me from the ground  
Is the legend of my union with the other  
cell I found,  
And the river silt was Eden, and mitosis  
was the Curse,—  
Apple of the Tree of Knowledge, which I  
ate of for the worse.

Bye and bye I left the water and betook  
myself to land,  
For now I had my arms and legs. I crept  
upon the sand.  
No more with swift flagellum nor with fins  
was I to swim,  
But henceforth with tail prehensile was to  
swing from limb to limb.

I had closed my ugly gill-clefts and devel-  
oped lungs—a pair;  
To shield me from the wind and sun I grew  
a coat of hair;  
The embryo will show 'twas so, if you'll  
investigate,  
For in its growth it parallels my every for-  
mer state.

Ten million years in woods and hills, and  
then to caves I took,  
An age reflected now in flats, since I my  
tail forsook;  
For surely tails were in the way in quar-  
ters so compact,  
And I'm becoming civilized, my habits  
more exact.

When in the silt I looked at you, no need  
for words at all;  
O happy was that Eden state before we  
had our fall!  
If I'd staid unicellular and had no thought  
of growing,  
The complex things I've had to learn I'd  
have no need for knowing.

My offspring now odd noises makes, then  
imitates my speech;  
The growing race did just the same, in-  
vestigations teach.  
My offspring takes to picture books and  
likes to whittle sticks;  
I first drew pictures in my cave; with flints  
my spears I'd fix.

My growing sons, to hunt and fish like bet-  
ter far than school;  
This is the primitive in them, old love of  
glade and pool.  
They like to romp, and play and shout, and  
they to fight are prone;  
These represent the games and war I waged  
with club and stone.

My girls *undress*, use paint and dance,  
these from a past remote  
The female used to lure the male; with  
pulchritude *she* smote.  
Each daily thought and action is but the  
old revived;  
Though to new forms they have evolved  
from old they are derived.

The manifold concerns of life, its worries,  
works and wars,  
Religions, money, politics, fools, criminals  
and bores,  
Reformers, laws and hypocrites, with ill-  
ness, pain and death,  
Along with taxes and the rest, to name I  
lack the breath—

If I'd staid unicellular none such I'd have  
fear,  
And as germ cells immortal are, my heaven  
had been here.  
But I took on somatic cells, just why I  
cannot tell,  
But since that time they've clung to me and  
formed my mortal shell.

New, when I've passed myself along to  
all my progeny,  
I mean my real, my germinal self, my cells  
that will not die,  
The rest, my frail somatic frame, will lin-  
ger for a time  
And then return from whence it came, into  
the ooze and slime.

I've come, with changed requirements as  
new conditions rose;  
Have I changed my environment? Has it  
changed me? Who knows?  
My old forms passed as I progressed, my  
present form evolved  
From my selections in the past wherein my  
lives revolved.

Such is the biologic creed; I lived for eons  
in bliss,  
But never felt quite satisfied till science  
taught me this.



I was not born when I was born, and no  
one knows how old  
I really am, or what I'll be before the sun  
grows cold.

One question more is all I ask; I came  
forth from the wave,  
A man potential in my threads,—all that I  
am or have.  
Whence sprang these wondrous nuclei, so  
foreign to the clod?  
I do not know, but something deep, my in-  
stinct, answers "God".

R. S. Cone.

## In Lighter Vein

### A Splendid Party.

A lady who had given a dinner party met  
her doctor in the street the following day,  
and stopped to speak to him.

"I am so sorry, doctor," she said, "that you  
were not able to come to my dinner party  
last night; it would have done you good to  
be there."

"It has already done me good," he replied  
tersely. "I have just prescribed for three of  
the guests."—The Tatler.

### "You Can't Fool All of the People—"

"Step right up, ladies and gentlemen,"  
bawled the barker through a huge mega-  
phone, "and see the woman get sawed in two  
before your very eyes. All for the price of  
one dime, the tenth part of a dollar!"

"Oh, well I'll take a chance," laughed the  
Crafty One to himself, "though, of course, it  
must be all a trick. Otherwise, they'd charge  
more."

### A Plea for Louder Neckties.

Some men long for the soothing touch  
of lavender, cream and mauve,  
But the ties I wear must possess the glare  
of a red hot kitchen stove.

The things I read and the things I do  
are sensible, sane and mild,  
I like calm hats, and I don't wear spats  
but I like my neckties wild!

Oh, give me a wild tie, Brother,  
one with a cosmic urge,  
A tie that will swear and rip and tear,  
when it sees my old blue serge.

Oh, some will say that a gent's cravat  
should only be seen, not heard,  
But I want a tie that will make men cry  
and render their vision blurred.

I yearn, I long, for a tie so strong  
It will take two men to tie it,  
If such there be, go bring it to me;  
whatever the price, I'll buy it.

Oh, give me a wild tie, Brother,  
one with with a lot of sins.  
A tie that will blaze with a hectic gaze,  
Down where the vest begins.

—Author Unknown,  
Copied from "Common Sense".

## Observations from the Lighthouse

*In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.*

### THE TONSIL QUESTION.

During the past year, the editor has been asked frequently by physicians in different parts of the state for an opinion upon the removal of tonsils—when should tonsilectomy be advised, is the present tendency in some quarters too radical, is the tonsil possessed of any important physiologic function, and so forth. In consequence of this evident uncertain state of mind among practitioners, it seems wise to devote this space at the present time to a review of some of the recent literature upon different aspects of the tonsil question, and then set forth some of our own opinions upon the general problem.

### FUNCTION.

Efforts to prove that the tonsil is a normal organic part of the body and has a physiologic function in the human economy go merrily on, but, as yet, no one has succeeded in showing that the tonsil plays any important part in the life of the normal, healthy, human being. Whatever it may have been in some previous stage of human existence, it is at present one of the useless appendages or remnants of anatomic structure, comparable one might say to the vermiform appendix.

Considering the tonsil as a gland and investigating the possibility of there being "reducing substances" secreted by its tissue, Gino-Cornelli (Arch. ital. di otol., etc., Turin, 35:387, Dec., 1924) follows up the work of Farmachidis and Vattuone, who in 1914 claimed to have found an internal secretion in the tonsils that had a reducing effect upon glucose. Fleischmann had already demonstrated that the tonsils contained reducing substances which give a special color reaction when combined with gold chlorid, analogous to that obtained by Richter in extracts of thyroid and other glands. Cornelli has carried out a series of experiments to test the validity of these conclusions. He made use of a common aqueous extract of fresh ox tonsils (previously triturated) obtained by a 24-hour process of digestion, in the cold, in distilled water rendered slightly alkaline by a 0.05% solution of sodium hydrate. To a small amount of this extract of whole tonsil he added a few drops of 1% gold chlorid solution. The color reaction was still negative after 24 hours and the fluid still alkaline. In his next experiment he used 5% gold chlorid, that was strongly acid. After 24 hours a

flaky precipitate, partly of a violet hue, appeared, with no clear line of demarcation from the uncolored supernatant fluid. It was thus evident that the color reaction is closely connected with the acid medium and is independent of the temperature. Further experiments proved that the substance that reacts with the gold chlorid becomes dissolved under the combined action of heat and acidity, but is precipitated when either of these factors is lacking. It was possible to isolate 2 substances almost certainly albuminoid, to one of which was united a third that could be isolated by simple lavage. This last substance had a marked reducing action on gold chlorid and, unlike the others, remained in suspension in an alkaline medium but became dissolved when hearted in an acid medium, without losing its reducing properties. Further study showed that this substance was contained in the mucosal glands. It is generally agreed, however, that the finding of such reducing substances in the tonsil is a matter of no particular physiologic significance and does not furnish any ground for assuming that the tonsil is an endocrine gland.

By means of a new series of experiments a substance was also found in the tonsils which has a pronounced glycolytic property in an alkaline medium, but which is lost if it is subjected to a temperature of 55°C. for an hour. The author thinks that the differences between the 2 reactions are more apparent than real. He has tried the same experiments with other oral and lymphatic glands with negative results. As he has found in the blood serum of a number of different kinds of animals a color reaction that suggests the presence in the blood of a glycolytic ferment, thermolabile at 55°C., he is inclined to believe that the mucosal glands are provided with a double secretion.

#### THE SEAT OF PATHOLOGIC CHANGES.

Turning next to a consideration of the tonsil as a pathologic proposition, we find a series of papers on focal infections and upon the abnormal conditions found in tonsils that had appeared innocent looking in the throat but which when removed under the suspicion that they might possibly be the cause of trouble existing in other parts of the body proved to be the home of definite abscesses or of wide-spread areas of septic material. That a septic focus in the tonsil may be the source of origin for inflammatory conditions in almost any part of the body has now been so thoroughly proved as to require no argumentative action but a mass of evidence continues to appear in support of the established theory. Some of the recent contributions are worthy of special consideration because they present new features or furnish strong substantiation for the theories heretofore promulgated.

Reidar Gording (*Acta otolaryngol.*, Stockholm, 6:306, No. 3-4, 1924) presents an interesting report of clinical and experimental studies of the etiology of articular and muscular rheumatism, with special reference to tonsillogenic infection. The 260 patients constituting the material for his investigation were well-to-do summer visitors at the Norwegian health resort of Sandefjord, and from his report we cull the following statistics: (1) In 30 of 108 patients, (88 women and 20

men) suffering from primary chronic polyarthritis, a tonsillogenic etiology could be established, whereas in the other 78 cases such a conclusion was not warranted by either the history or objective findings. In 73% of the tonsillogenic cases, the onset occurred before the thirty-fifth year, the mean age being 27 years, and in 67% of the nontonsillogenic cases it occurred after the fortieth year, the mean age being 43 years. (2) Among 107 patients (73 women, 34 men) with chronic rheumatism (of muscles and nerves), there were 34 tonsillogenic cases with a mean age of 44, 74% being over 40. (3) Among 31 patients (24 women, 7 men), with secondary chronic polyarthritis, there were 15 tonsillogenic cases. (4) Among 14 patients (8 women, 6 men) with acute articular rheumatism, there was only one case in which the affection did not begin with acute follicular tonsillitis. Thus, a tonsillogenic origin was established in 36% of the total (260) cases with a mean age of onset of 27 years; in the other 64% the mean age of onset was 44 years.

Tonsillectomy was subsequently performed on about 50 patients belonging to the various tonsillogenic groups. Of these cases, 34 have been under observation for a sufficient length of time; improvement was effected in 10 of 16 cases of primary chronic polyarthritis, in 1 of 3 cases of secondary chronic polyarthritis, in 6 of 9 cases of chronic rheumatism, and in 5 of 6 cases of acute rheumatism, representing a total percentage of 65%. The bacteriologic examination revealed hemolytic streptococci in the tonsils of all these patients, sometimes in association with *Streptococcus viridans*; there were usually a few additional colonies of staphylococci and, in some cases, of *Micrococcus catarrhalis*. Intravenous inoculation of rabbits resulted in all cases in typical monarthritis or polyarthritis, hemolytic streptococci being invariably recovered from the articular exudates. But hemolytic streptococci were found also in the tonsils of 6 to 20 patients without tonsillar phenomena, and the publications of other authors corroborate the conclusion that the demonstration of *Streptococcus hemolyticus* alone is not of decisive significance.

From this same health resort institution, Andreas Tanberg, reports his observations as to the relationship between affections of the tonsils and chronic joint diseases (*Acta otolaryngol.*, Stockholm, 7:180, No. 2, 1925). He adopts the 3 groups, as defined by Gording: Group 1 comprises those patients (76) who came to be cured of residual pains and stiffness after acute rheumatism, the joint disease in which a relation to tonsillar affections is most generally assumed, angina being mentioned as the cause in 25-75% of cases. The author pays special attention in his discussions to the proportion of the sexes. He quotes the following figures from the health statistics of Christiania during 1913-1922: Angina, 6458 men, 6080 women; acute rheumatism, 828 men, 815 women. The preponderance of male patients is interesting, because in practically all other joint diseases the female patients are more numerous. Of the patients at Sandefjord in this group, 60% were women. It is conceivable that, for social reasons, women suffering from secondary articular rheumatism go to health resorts more frequently than men. Group 2 includes the 63 patients



suffering from secondary articular rheumatism after previous acute rheumatism. In this group, there were more than twice as many women as men (70%), which is surprising, since the primary cause (acute rheumatism) is the same as in the preceding group. Possibly, women are more predisposed to chronic developments; but it is also possible that a number of patients included in this group properly belong to the third group, as differential diagnosis is often difficult between acute rheumatism and polyarthritis with a febrile onset. The main interest centers in group 3, primary chronic progressive polyarthritis (257 cases). In this group, the proportion of female patients amounts to 80%, and it would be difficult or impossible to make this tally with the theory of an infective etiology. But while there is no record of any infection attacking the 2 sexes in the proportion of 4 to 1, this is not so unheard-of in regard to metabolic diseases (Basedow's disease in women; diabetes and uric arthritis in men). Tanberg's conclusion that the articular affections belonging to this group are largely due to metabolic disorders is strengthened by the observation of certain maxima, exhibited by the age curves for the 2 sexes. The female curve, shows 2 maxima, one between 20 and 30 years, and another between 40 and 50 years with the peak of the whole curve at about 50. This latter maximum is clearly connected with the menopause, and many patients state that they observed the first symptoms at or shortly after that time. While this maximum has no counterpart in the male curve, the earlier maximum is paralleled in the latter, even though to a less degree, and the etiology of this younger age-group must stand on its own merits. There can be no doubt that in this earlier group infections and especially tonsillar affections play a considerable part, and the statements of many patients are to the same effect. But as far as the whole group is concerned, the constitutional factor dominates the etiology.

Alfred Hand (Internat. Clin., 4:189, Dec., 1924) speaking of the effect of tonsillectomy on existing visceral disease, reminds us that while we must not be content with looking on the tonsils in children as the sole focus of infection, the fact remains that they are the greatest source of rheumatism and endocarditis at this time of life. In fact, one of the most important indications for the removal of tonsils and adenoids is with the view to preventing acute rheumatism and endocarditis. Tonsillectomy has also been shown to have a beneficial effect on existing organic disease of the heart and it is surprising how well patients with even seriously damaged heart muscles stand etherization and the effects of this operation. Hand believes that in all such cases infected tonsils are best removed early but he would if possible select such a time as the patient may be found free from fever for several weeks.

S. H. Mygind has investigated 100 cases of "rheumatic fever" and 22 cases of acute nephritis treated at the Communal hospital of Copenhagen, Acta otolaryngol., Stockholm, 6:335, No. 3-4, 1924) the term rheumatic fever being used for the sake of brevity but in the wide sense covering not only rheumatic

polyarthritis in its more or less acute forms, but also related and complicating affections, such as verrucous endocarditis, chorea minor and erythema nodosum. Among the rheumatic fever cases, 40% were recurrences (24 patients had had two attacks, 9 three, 7 four or more), but only 22% of the nephritis cases were recurrences. In the latter, the interval averaged  $5\frac{1}{2}$  years, and in the former  $4\frac{1}{2}$  years (with 40% under one year, and ranging up to 20-30 years). The age curve for rheumatic fever culminates in the 20-24 year old group with a steep descent on either side (but equalized after the age of 35 years); It resembles the author's acute appendicitis curve, and to a certain degree, also his acute tonsillitis curve after the first 2 decades. In two-thirds of the rheumatic fever cases, the author examined the tonsils himself, and his percentage of findings is indicated by the unbracketed figures in the following summary. In the other cases this was done by a laryngologist, and the patients were in a comparatively advanced stage, in which the tonsillar examination yields different results, as appears from the bracketed figures here following. Among the patients who had only one attack, 64% (26%) had initial acute tonsillitis, while in 37% (20%) the diagnosis of chronic tonsillitis, which is often difficult, could be definitely established. The author's examination failed to reveal throat affections in only 9 of his patients. But 7 of these presented themselves 3 weeks or more after the onset of rheumatic fever, when all symptoms of a slight tonsillitis would have disappeared, while the eighth had had influenza, and the ninth frequently suffered from acute maxillary sinusitis. Among the recurrent cases, acute tonsillitis was established in 30% (25%) and chronic tonsillitis in 40% (0%) of cases. Among the nephritic patients, acute tonsillitis was established in 55% and chronic tonsillitis in 36% of cases.

Mygind points out that acute tonsillitis frequently sets in at the same time as, or even some days later than, arthritis or erythema nodosum, etc., and cannot therefore be regarded as the "initial" phenomenon in the proper sense, and still less as the causal factor. He arrives at the conclusion that not acute but chronic tonsillitis is the decisive under-lying condition; he regards the prolonged period of excessive fatigue preceding the rheumatic attack, of which most of his patients complained, as one of the most characteristic symptoms of chronic tonsillitis. The latter seems to be specially related to inflammation (usually chronic) of the adenoid tissue, which is prevalent in the tonsillar region and most strongly developed during the years when the rheumatic fever curve reaches its apex. Mygind agrees with Chvostek and Weintraub that rheumatic fever is not an attenuated septic infection but an intoxication (anaphylaxis). Bacteremia may, of course, supervene, and the microbes would naturally become localized in the rheumatic lesions.

#### THE GENERAL PRACTITIONER AND THE TONSILS.

Under the title of "Notes Upon Tonsils. Adenoids and Some Middle Ear Infections in Childhood", Walter Crosse (M. J. Australia. 11:264, Sept. 13, 1924) enumerates the symp-



toms that should lead to a careful examination and states that adenoids, if present, will generally be found to be a greater factor than the tonsils in causing trouble. It is remarkable how tonsils, he says, though fairly large will diminish in size after removal of the adenoids. Aural symptoms are frequent in children having tonsils and adenoids; in fact, he considers it safe to say that all deafness in children, often mistaken for inattention, is due to their presence. Examination of the ears of children with adenoids almost always reveals retracted or congested ear drums and in cases showing similar ear conditions but no growth in the postnasal space, the tonsils will be found to require treatment. Decomposing debris may often be expressed from the crypts of apparently healthy tonsils. Children presenting evidences of rheumatism should certainly have their tonsils removed when other possible sources of infection have been investigated without result. Acute suppurative otitis media is very common among children having enlarged tonsils and adenoids, the ears being particularly susceptible to invasion by microorganisms because of the favorable anatomic conditions, the short open eustachian tube and the close proximity of the germ-harboring tissues in the nasopharynx. This applies especially to appearance of the exanthematous infectious diseases among children having tonsils and adenoids. Children who pick up measles or scarlet fever should have a careful aural examination daily, without regard to the presence or absence of pain in the ears, so that if evidence of otitis media should appear the drum may be incised at once and the infected contents of the tympanum evacuated before any damage can be done to the delicate structures of the middle ear, or before extension to the mastoid cells can take place. If this feature of treatment could be made a routine measure in the care of infectious diseases, a great deal of aural trouble could be absolutely prevented.

James Kerr Love (Glasgow M. J., 102:314, Nov., 1924) calls attention to the existence of enlarged cervical glands as a sufficient reason in many cases for tonsillectomy; this condition is usually supported by the history of recurring sore throats, some deafness or aural discharge. It is equally true that evident disease of the faucial tonsil, as shown by small abscess formation, or the extrusion of cheesy masses from crypts, is sufficient reason for advising tonsillectomy, whether other inflammatory symptoms are present or not. He also emphasizes the point that any constitutional condition, especially of an organic type has not been fully diagnosed until the cavities of the mouth and nose have been thoroughly examined. If, with teeth and nasal sinuses healthy, the tonsils are large whether apparently healthy or not, they should be removed.

The diagnosis and treatment of latent tonsillitis is dealt with in an article by Judson Daland (Illinois M. J., 46:248, Oct., 1924). The systemic manifestations of chronic or latent tonsillitis or tonsillar infection are usually observed at or after middle age. The tonsils may be considerably or moderately hypertrophied, small in size or buried. The anterior and posterior pillars are frequently adherent to the tonsil and the anterior surface of the anterior pillars often presents a dark

red, congested appearance. Another evidence is a thin milky secretion, obtained from the tonsils by pressure and containing pathogenic organisms, usually *Streptococcus hemolyticus* or *viridans*. The crypts are frequently dilated, and when material secured from the bottom by a platinum loop is cultured, the same organisms may be obtained in pure culture. Similar organisms may be obtained from the surface of the tonsils and from the bottom of the spaces between the tonsils and the anterior and posterior pillars. Usually chronic or latent tonsillar infection gives a history of one or more attacks of acute tonsillitis. The presence of enlarged, indurated and painless cervical glands aids in the diagnosis. In more than 50% of cases of chronic tonsillar infection there is a well marked increase of the small lymphocytes, a corresponding decrease in the polymorphonuclear cells and in the leukocytes per cubic millimeter. Anemia or chloro-anemia usually coexists.

### CHRONIC TONSILLITIS.

A symposium on this subject by eminent British authorities has recently appeared and it seems deserving of presentation in abstract form partly because the opinions rendered correspond so closely with the views of American specialists. A. Brown Kelly (Brit. M. J., London, p. 804, Nov. 1, 1924) sums up the whole situation as follows: The term chronic tonsillitis designates a long continued, mild inflammation of the tonsil; oftener, however, it is used to imply a state of the tonsil which is not manifestly inflammatory but which predisposes to acute attacks. The commonest affection of the tonsils is enlargement in the young. This may give rise to various symptoms which experience has taught will pass off when the tonsils are removed. In adults with chronic tonsillitis the disturbances due to sepsis are commoner and more important than those from hypertrophy. The faucial tonsils are peculiarly adapted to the development of septic foci. If there is a focus of infection in the tonsil or a predisposition to tonsillitis or swelling of the cervical tonsillar gland, tonsillectomy is indicated even though there is no evidence of a causal relation between the septic tonsil and the disease in question. When the onset of tonsillar infection coincides with that of the secondary disease and a focus of infection exists in the tonsil, the prospect of curing the secondary disease by tonsillectomy is brightest. If the tonsil is clinically healthy, has caused little or no trouble in the past so that there are no local indications for its removal, and if there is nothing in the clinical history pointing to a relation between the tonsil and the systemic disease under investigation, tonsillectomy should not be recommended. When a systemic disease caused by a primary septic focus in the tonsil has been long present, it may receive no benefit from the removal of the tonsil and focus. The failure of the tonsillectomy is then probably owing to the development of secondary areas of infection which have become more potent than the primary. Of all the systemic diseases etiologically related to focal infections in the tonsils, operation is most often indicated and successful in those belonging to the rheumatic group. The tonsils are most liable to become acutely inflamed in young subjects, and it is they who

suffer oftenest from rheumatic fever and endocarditis following an attack of tonsillitis. Tonsillectomy has therefore been employed in those who have had rheumatic fever, in order to get rid of a likely source of infection, and so reduce the tendency to recurrence with possible further involvement of the joints and heart. Chorea being now regarded as a rheumatic or streptococcic infection of the nervous system, and in the past having been occasionally cured by the removal of tonsils and adenoids, the possibility of an etiologic connection between a septic focus in the tonsil and this disease should be kept in view.

Appropos of the point made by Kelly, that chorea is to be classed among the affections often attributable to chronic septic foci in the tonsils, Octavus Dulaney (Kentucky M. J., 22:441, Oct., 1924) reports that since 1914 he has observed 23 cases of chorea secondary to primary foci of infection in the tonsils, the ages of the patients ranging from 3 to 36 years. Most of these tonsils were of shrunken appearance and of the "submerged" type. After removal they were found to contain pus-filled crypts with occluded orifices. The best way of diagnosing such tonsils is by placing the small cold electric light on the DeZeng standard diagnostic set in firm contact with the lower border of the tonsil, which is thus literally transilluminated. Tonsils of the type described appear pale and translucent with dark areas (pus pockets). Streptococci and pneumococci were found to be the most common organisms harbored. Most patients had associated endocarditic and rheumatic conditions. A complete cure was effected in 22 out of 23 cases by tonsillectomy, combined with adenoidectomy where indicated; some of these cases have been under observation over 3 years. The one remaining patient, who refused operation, has greatly improved under local treatment of the tonsils and autogenous vaccine therapy. The choreic symptoms have disappeared, but his nervous irritability persists.

(To be continued.)

## County Society Reports.

### ATLANTIC COUNTY.

#### Atlantic City Hospital Staff.

The stated monthly meeting of the Atlantic City Hospital Staff was held on the evening of July 25, 1925, at the hospital, with Dr. Richard Bew presiding.

In reporting for the building committee, Dr. Bew stated that the process of construction on the new wing would soon be inaugurated. After dispensation of the usual business activities the Scientific Program followed, embodying a report of the surgical service for 3 months by Dr. Thomas D. Taggart.

Total admissions .....	108
No. of Operative Cases .....	44
Recovered .....	35
Deaths .....	9
No. of Nonoperative Cases .....	64
Recovered .....	59
Deaths .....	5
Total Deaths, with causes:	
Appendix .....	1

Fractured Skulls .....	4
Palmer Abscess .....	1
Punctured Lung .....	1
Subacute Pancreatitis .....	1
Cerebrospinal Concussion .....	1
Ruptured Liver and Spleen .....	1
Parotid Abscess .....	1
Ruptured Head of Pancreas .....	1
Ruptured Lung .....	1
Second Degree Burn .....	1

Dr. Taggart further presented a case of traumatic pancreatitis. A child, male, 4 years of age; admission January 9, 1925. Upon admission the patient was extremely pale and in a severe state of shock. There was a laceration over the right eye, pupils negative, respiration slow and labored, rigidity and tenderness over the epigastrium, no evidence of fracture of the ribs. Pulse at first slow, 80 per minute, respiration 18. In the afternoon respiration 24, pulse 100. Blood examination revealed the following: hemoglobin, 64%; erythrocytes, 3,620,000; leukocytes, 18,600; polynuclears, 80%; lymphocytes, 19%. On the second day another blood examination was made revealing 68% hemoglobin; erythrocytes, 3,520,000; leukocytes, 15,900; polynuclear, 84%, and lymphocytes, 17%. During this time the temperature rose, patient presenting a picture of being desperately ill; pulse 126, respiration 26. A tentative diagnosis was made of intraabdominal injury accompanied by concussion of the brain. A laparotomy was performed on the day following admission and on opening the abdomen a moderate amount of dark blood was found with rupture of the gastrohepatic omentum and also rupture of the head of the pancreas. The patient, still in profound shock, died at 3:30 on the following morning. There was no injury of any other internal viscera. Dr. Taggart reported a group of cases comprising 29 uncomplicated ruptures of the pancreas. The mortality was 36.3% in the operative cases and 100% in the unoperative, 7 in number.

A second case presented was that of an adult male, age 40, admitted with a diagnosis of an acute appendicitis. Upon admission, physical examination disclosed tenderness over the right rectus muscle with no definite localization of pain. Patient was operated on soon after admission and an adherent diseased appendix was removed. Dr. Taggart felt that this was insufficient pathology to account for symptoms present and upon further search found a strangulated loop of intestine from the obliterated vitelline duct with Meckel's diverticulum 3 inches in length. The duct led from the diverticulum to the umbilicus forming a fibrous cord which was cut to relieve strangulation. The diverticulum was excised and the intestine sutured. Patient made an uninterrupted recovery. Dr. Taggart emphasized the possibility of the presence of added pathology in addition to appendicitis which always should be searched for if there is a vestige of doubt in the mind of the operator, at the same time cautioning against too much intraabdominal manipulation.

In discussing Dr. Taggart's case Dr. Theodore Senseman reported a similar case in which a girl was admitted with a diagnosis of appendicitis, and at operation he discov-



ered an incomplete volvulus causing almost complete obstruction of the bowel.

Dr. Homer I. Silvers spoke of the value of blood counts in internal hemorrhage cases but also emphasized the importance of a minimum amount of intraabdominal manipulation in a certain proportion of cases as typified by gangrene or suppuration.

Dr. Richard Bew held that the rapid falling of hemoglobin and red blood cells with an accompanying increase in leukocytes presented a valuable picture as an aid in diagnosing internal hemorrhage.

Dr. Clarence Andrews believed that in any abdominal injury associated with shock and rapid pulse the question of blood count is of great value.

Dr. Robert A. Kilduffe stated that hemorrhage and leukocytosis comprised a well defined picture and that nature walls off an injury in its first efforts. He further agreed with Dr. Silvers that each case presented is a law unto itself and that no 2 cases present identical features.

Dr. W. J. Carrington cited several cases embodying the above, after which Dr. Thomas Taggart closed the discussion.

Upon proper motion the meeting was adjourned.

## Communications.

### AN OPEN LETTER FROM DR. MARVEL.

My dear Editor:

Will you kindly oblige me by giving publicity to the following letter, through the columns of the Journal of the Medical Society of New Jersey? The purpose of this letter is to answer a number of inquiries from members of component medical societies in different parts of the state, and to explain my reason and purpose for sending the communication, which I did, to the component medical societies of the state just previous to the approaching annual meeting of the State Medical Society in June, past.

In the first place, I wish to take full responsibility for the communication referred to, and to declare my position with reference to the same; my sole purpose being wholly in the material interests of our medical societies, and the future strength and harmony of the profession in the state.

The situation was as follows: The State Medical Society had authorized the revision of its Constitution and By-laws. The report was forthcoming from the Revision Committee at the on-coming meeting of the Society in the early part of June. Circumstances and an illness combined, prevented my presenting the substance of the communication addressed to the component societies, to the committee in person for consideration. Failing in this, I wrote the committee, and on my return home in April a communication from its chairman awaited me, stating the committee had finished its report and could not, at that late date, include the matter in question. Believing the matter to be of importance to the future interests of both the component and state societies, I dispatched a communication to each of the 21 component societies, for reasons to be stated, viz: These societies are

the unit or primary bodies, the membership of which composes both the component and the state societies; hence, what was of concern to the one, necessarily was of importance to the other. The substance of my communication to the component societies referred particularly to Section 4 of Article 5 of the Constitution and By-laws, dealing especially with the authority and responsibility of the "Permanent Delegates", and a recommendation that the same be deleted from the Constitution and By-laws of our medical societies. The urgency for the communication, at the time it was sent out, was due to the approaching annual meeting of the State Medical Society, at which meeting the House of Delegates was expected to consider the report of the Revision Committee and the chairman having already stated that the matter in question could not be considered by his committee; believing the subject should be approached through the component societies, what I did seemed the most direct and reasonable thing to be done under the circumstances. From evidences in hand, it would seem the whole matter has been greatly misunderstood; that quite a few of the members of the different component societies have variously speculated as to both the reason for and the advantage of the deletion. If the act of sending the communication was precipitate, as some have claimed, it was equally unfortunate; but from my point of view, since so many were ignorant of the Constitution and By-laws, as both then and now constituted (reference herein is restricted to the election, the office and authority of the Permanent Delegates) I fail to see any reason for either surprise or misunderstanding of my views and their purpose as previously stated in my communication to the component medical societies.

Since the inquiries have been largely concerned with "why I did not follow my communication to the component societies with the presentation of the substance of the same" at one or another of the sessions of the House of Delegates during the meeting of the State Medical Society, I am pleased to have an opportunity to explain. Two reasons may be stated justifying my silence on those occasions: (a) No report or reference to the subject was forthcoming from any of the component societies to which the communication was addressed, at any of the sessions in question at which I was in attendance. (b) After more deliberate and mature study of the subject, on my part, following the mailing of the communication, I became convinced that the House of Delegates of the State Medical Society was without power to act in the matter. The Constitution and By-laws of any chartered body, medical or otherwise, is created for the purpose of directing the conduct of the business of said organization in an orderly and legal manner, and is entirely without authority to change, alter or otherwise interfere with "corporate privileges" specified in the charter.

It is now obvious that had the matter in question been acted on in the House of Delegates of the state or of the component medical societies, the action would have been without recognized authority. The legal aspect of the question at issue seems to be without remedy except by unanimous consent of the



memberships, to amend our charter, and the consent and coöperation of the state legislature to that end—or as has been suggested "to keep our present charter intact, and operate under that given by the American Medical Association, the Constitution and By-laws of which make no reference to complicating rules and privileges.

In restating my position in the matter in question, I want to emphasize the fact that I am strongly of the opinion that the problem of the "Permanent Delegate", as it operates in the business procedures and policy issues of our State Medical Society, will sooner or later occasion division and dissensions, ultimately resulting in influences and legislation detrimental to the harmonious interests of the State Medical Society, and likewise to the interests of the component societies. The Scientific Program should be the towering interest of the Society, and every effort possible should be focused on an endeavor to make its educational advantage so attractive, none could afford not to be in attendance at its annual sessions.

Very truly yours,

Philip Marvel, M.D.

#### LETTER FROM STATE BOARD OF MEDICAL EXAMINERS.

On April 26, 1925, Wm. McKinley Ray, John F. Malone, William J. Lenox and Philip, all of Elizabeth, N. J., and unlicensed chiropractors, were found guilty of practicing medicine without a license in the Elizabeth District Court, and judgment entered for the penalty and costs.

On April 28, 1925, Daniel Cusack, a naturopath, and Joseph M. Voza, an unlicensed chiropractor, both of Jersey City, were found guilty of practicing medicine without a license in the First District Court of Jersey City. The attorney for Cusack filed notice of appeal. Voza refused to pay the penalty and was committed to jail for one hundred days.

On May 26, 1925, Frank S. Mansolillo, a licensed chiropractor of West Hoboken, was found guilty of practicing medicine without a license in that he used various electrical apparatus for the treatment of disease, and judgment was entered for the penalty and costs. Attorney for Mansolillo filed notice of appeal.

On June 1, 1925, Reuben Sassaman and Abraham Winogradow, unlicensed chiropractors, Winogradow from Perth Amboy and Sassaman of New Brunswick, were found guilty of practicing medicine without a license in the New Brunswick District Court, and as they refused to pay the penalty they were committed to jail for one hundred days each. Sassaman has since paid the penalty and costs and been released from jail.

On the same day, June 1, Mary Rull was convicted of practicing medicine without a license in the New Brunswick Court and was committed to jail for one day.

On June 9, 1925, Borrmann F. Jones, an herb doctor of Newark, N. J., was convicted on a second charge of practicing medicine

without a license and judgment entered for the penalty of five hundred dollars. Attorney for Jones has served notice of appeal.

On June 18, 1925, Wm. E. Clunn, an unlicensed chiropractor of Pitman, N. J., pleaded guilty to a charge of practicing medicine without a license and judgment was entered for the penalty and costs.

On May 28, 1925, George Maza, George Coleman, and C. Valentine Jilson, unlicensed chiropractors of Newark, N. J., were found guilty of practicing medicine without a license and judgment entered in each case for the penalty and costs. All have served notice of appeal.

On May 26, 1925, Ernest R. Tegen, an unlicensed chiropractor of Newark, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On May 22, 1925, T. Harry Pound, an unlicensed chiropractor of Plainfield, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On May 5, 1925, Giuseppe Gorga, M.D., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On April 20, 1925, Emery Krausz, M.D., pleaded penalty to a charge of practicing medicine without a license and paid the penalty and costs.

On April 18, 1925, John Varga, pleaded guilty to a second charge of practicing medicine without a license and judgment was entered for the penalty.

On April 22, Alexander Berg, a minister of Trenton, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty. He was practicing chiropractic and giving electric treatments.

On June 23, Louis P. Conway of Jersey City, an unlicensed chiropractor, was tried on a charge of practicing medicine without a license in the Jersey City District Court, and judgment for the penalty and costs entered. Attorney for Conway filed notice of an appeal.

On June 18, Irwin Yarnall, an unlicensed chiropractor of Westfield, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On July 1, Michael Letizia, a druggist of Paterson, N. J., was tried on a charge of practicing medicine without a license and judgment for the penalty and costs entered. Counsel has applied for a re-trial.

On July 15, 1925, Robert W. Dickey, M.D., of Atlantic City, was tried on a charge of practicing medicine without a license. The judge on August 6 entered judgment for the penalty and costs.

On July 15, Henry C. Niederee, who practiced in Lakewood, N. J., was tried in Atlantic City, for practicing medicine without a license. Decision was reserved.

Yours very truly,  
Alexander MacAlister, Secretary.

## Deaths.

(Continued from page 252.)

REILLY, Dr. John P., of 215 Elizabeth Avenue, Elizabeth, died on August 14, 1925, of pernicious anaemia.

Dr. Reilly was born at Plattsville, Wis., on April 26, 1860, and obtained his medical education at Bellevue Medical College, New York City, graduating in 1888. He practiced for a time in Brooklyn but soon removed to Elizabeth where he continued busily at work until about two years ago when his illness developed, which eventually ended his life. The doctor's professional work was entirely in surgery. He studied in Berlin in 1905 and twice each year he visited the clinic of the Mayo Brothers in Rochester, Minn., besides doing research work independently and in 1914 was made a Fellow of the American College of Surgery. He had specialized in the surgical treatment of goitre, having operated several hundred times for this disease. He was one of the founders of St. Elizabeth Hospital and had been President of the Medical Board for many years.

He had also shown a marked interest in civic affairs and in 1903 was appointed to the Board of Education, filling an unexpired term of a resigning member. He continued in this Board until January, 1913, then resigning in order to remain as a member of the Board of Library Trustees. On both of these public boards he had been chosen as presiding officer and he was still serving on the Library Board at the time of his death. His long life was one of service, not merely to his patients but to the whole city in which he spent his life, and the esteem in which he was held was evidenced by the placing of the flags on the municipal buildings at half mast for the usual period of thirty days.

## Marriages.

FAILING-CLOSE.—On August 3, 1925, at Delaware Water Gap, Miss Claire Ruth Close, daughter of Rev. Dr. and Mrs. O. Bell Close of Belleville, to Dr. Brayton Earl Failing, of 136 Elwood Avenue, Newark.

SMITH-EMERSON.—On August 22, 1925, at the Methodist Episcopal Church, Orange, Miss Dorothy Brewster Emerson, daughter of Dr. and Mrs. Linn Emerson, of 303 Park Avenue, Orange, to Romeyn Woolsey Smith, of New York City.

WAKELY-GALE.—On August 17, 1925, Mrs. Maud Claire Gale, of 60 Harrison Street, East Orange, to Dr. William A. Wakely, of 120 South Main Street, Orange.

## Engagements.

Mr. and Mrs. John M. Reynolds, of Fairview Heights, Phillipsburg, have announced the engagement of their daughter, Miss Irene E. Reynolds and Dr. T. Harry Spillane, also of Phillipsburg.

The engagement of Miss May E. Rosecrans, daughter of Dr. and Mrs. James H. Rosecrans, of 826 Hudson Street, Hoboken, and Willett Clark Pierson, of 30 South Munn Avenue, East Orange, has been announced.

## Personals.

Dr. James B. Davidson of 516 Broad Street, Newark, is making a six weeks' tour of Europe, and will do clinic work in Berlin, Paris, Vienna and London.

Dr. and Mrs. William Petry and their daughter Beatrice, of 109 Treacy Avenue, Newark, have been motoring in Canada during August.

Dr. and Mrs. Jasper Coghlan of 540 Parker Street, Newark, have been spending three weeks of August at Lake Pleasant in the Adirondacks.

Dr. and Mrs. Lester R. Davis of 58 Elizabeth Avenue, Newark, are motoring to Eau Claire, Wis., to visit their son-in-law and daughter, Mr. and Mrs. Clinton S. Ferris. They will leave their car there and, accompanied by Mr. and Mrs. Ferris, will visit Yellowstone Park, Banff and Lake Louise.

Dr. and Mrs. John F. Hagerty of 30 Wallace Place, Newark, have been spending their vacation at Falmouth Heights, Mass. They return to Newark Labor Day.

Dr. Sarah M. Edwards of 207 Summer Avenue, Newark, and her niece, Miss Sarah Bullen, motored last month to Blue Ridge, N. C. On their return trip they visited Washington for a few days.

Dr. Albert S. Harden of 540 Warren Street, Newark, is spending a month at Island Heights with Mrs. Harden and their sons, Albert S. Harden Jr. and Bruce P. Harden, who left earlier in the season. Dr. Harden has been spending week-ends with his family.

Dr. and Mrs. Caldwell Morrison and their daughter, Miss Jean Morrison, of 379 Seventh Avenue, Newark, have been spending a month at Lake Winnepesaukee. They made the trip by motor, stopping for a visit at Gloucester, Mass., to their son-in-law and daughter, Dr. and Mrs. Herman Osgood.

Dr. and Mrs. J. T. Wrightson of 520 Clifton Avenue, Newark, sailed last month on the Fort Hamilton for Nova Scotia, the Saguenay River and Quebec. On the return trip they stopped in the White Mountains for a short stay.

Dr. and Mrs. R. D. Baker of DeForest Avenue, Summit, have been motoring through New England.

Dr. and Mrs. C. R. O'Crowley of 77 Abington Avenue, Newark, have been spending a month at Buckwood Inn at Shawnee-on-the-Delaware.



Dr. Harvey M. Ewing of Montclair and Newark and family have been summering during August at Humarock, Mass., where they remained until after Labor Day.

Dr. Robert D. Schimmelpfennig of 65 North Fullerton Avenue, Montclair, has been visiting Yellowstone Park, the Grand Canyon and Denver. He also visited Chicago clinics and hospitals. Mrs. Schimmelpfennig and their son Adolphe are spending the summer at Sea Gate, N. Y.

Dr. and Mrs. J. Irving Fort of 306 Roseville Avenue, Newark, left home on August 15 for Lake Kezar, Me., to remain at least a month.

Dr. and Mrs. Wells P. Eagleton of 212 Elwood Avenue, Newark, sailed last month on the Mauretania. They will go to Paris, where Mrs. Eagleton will remain with friends for two weeks while Dr. Eagleton visits Vienna. They will go to Geneva for the opening of the League of Nations and will spend September there. They will return about October 6.

Dr. and Mrs. Linus W. Bagg of 712 Clinton Avenue, Newark, have been spending part of August at Pleasant Point Club on Lake Ontario with the daughter, Miss Barbara Bagg, who has been there since July 10. They returned to this city September 1. Dr. and Mrs. Bagg have sold the Clinton Avenue home, and about October 1 will go to Montclair to live, but Dr. Bagg will continue his practice in this city, with offices at 87 Lincoln Park.

Dr. and Mrs. Harry H. Bowles, of Woodlawn Avenue, Summit, returned from a six weeks' trip to the Pacific Coast. Mrs. Bowles will join her mother and the children at Mrs. Phraner's summer home on Cape Cod for the remainder of the season.

Dr. Charles V. Craster, Newark's health officer, who went abroad several weeks ago for needed rest, has been through portions of France and Switzerland. He found Paris cool, rainy and full of folks from the United States. Before sailing for home he will visit Lucerne, Interlaken and Montreux.

Dr. George F. Corrigan of 344 Lafayette Street, Newark, has returned home from Europe, where he took a post-graduate course in London. He sailed for Europe May 30 to attend the Post-Graduate Assembly in London. Dr. Corrigan visited the British Isles and Ireland while there.

Dr. and Mrs. Nicholas Ramos of 54 Spruce Street, Newark, have been entertaining Dr. and Mrs. George I. Eddy and daughter, Miss Louis Eddy, of Philadelphia.

Dr. and Mrs. Henry G. Christian and son, Mahlon, of 994 Springfield Avenue, Irvington, have been spending a vacation in Maine.

Dr. and Mrs. Aims R. Chamberlain of 25 Lenox Place, Maplewood, have left for Holland, where they will spend several months.

Dr. and Mrs. Hery R. Dengler, of Springfield, and daughter, Julia, have been enjoying week-ends at their cottage at Seaside Park.

Dr. Herman Goodman, of New York City, has moved his office to 18 East 89th Street.

Dr. Andrew Wallhauser and family of 312 Mt. Prospect Avenue, Newark, are planning to leave the middle of September to spend about three weeks at Provincetown, Mass.

Dr. George G. Jackson of 14 Hill Street,

Newark, is spending two weeks' vacation at Asbury Park. Miss Beatrice Jackson, daughter of Dr. and Mrs. Jackson, who went in the middle of June to Europe, is expected to sail home September 5 on the Berengaria, due in New York September 11.

Dr. and Mrs. Clement Morris of 75 Washington Avenue, Newark, have returned from an automobile trip to Cape Cod and other parts of New England.

Dr. Saul Rubenow of 755 High Street, Newark, and brother have been visiting the Catskills. From there they toured through the White Mountains, calling upon the doctor's son, who was at Camp Penocook, N. H.

Dr. and Mrs. Charles E. Teeter of 418 Orange Street, Newark, and their son, Charles Edwin Teeter Jr., are spending August and September at their cottage at Bailey Island, Me.

Dr. Richard H. Staehle and family of 34 Lyons Avenue, Newark, have left for Belmar, where they will remain until September 15.

Dr. and Mrs. Irving A. Meeker and family of 581 Valley Road, Montclair, are spending the month at Mantoloking.

Dr. R. D. Moister of 7 Norwood Avenue, Summit, has returned to his office after a motor trip through Pennsylvania, the Adirondacks, Canada and the White Mountains.

Dr. W. J. Lamson of 120 Summit Avenue, Summit, has returned from a two weeks' motor trip to Bar Harbor, the White Mountains and Adirondacks, covering 1,800 miles. Dr. Lamson was accompanied by his brother, H. H. Lamson, and wife, of East Orange, and his cousin, Miss S. E. Judson.

Dr. C. C. Beling of 111 Clinton Avenue, Newark, with Mrs. Beling and their son Albert, have been spending a few days at Cragmoor, New York. From there they went to Lake Placid and stopped at Whiteface Inn. Later in the summer Dr. Beling and his son probably will take a trip to Canada, joining Mrs. Beling again before returning to Newark September 19th.

Dr. and Mrs. George J. Holmes, of 437 Parker Street, Newark, with their daughter, Miss Mary Holmes, have been motoring to New Bedford, Mass., and to Nantucket.

Dr. John H. Bassin has moved his residence and office from 784 High Street, to 25 Van Ness Place, Newark.

Dr. J. W. Siegel, of 490 Central Avenue, Newark, with Mrs. Siegel and their two children, Betty and Robert, have been enjoying the summer at their cottage at Point Pleasant.

Dr. and Mrs. John B. Casale, of 159 Clifton Avenue, Newark, have been spending several days at Belmar.

Dr. and Mrs. Carlo D. Martinetti, their daughter, Miss Carol Martinetti, and son, Carlo D. Martinetti, Jr., of 311 Central Avenue, Orange, have been making a motor trip of about two weeks in New England. They will stop at Stowe, Vt., at the foot of Mt. Mansfield, and also visit Mt. Katahdin, Me. At Cape Cod they will stop at Yarmouth. Miss Adda Woodworth of Carteret Place, Orange, will accompany them.



Continued from page 366.

Dr. and Mrs. Henry G. Holler, of 234 Montclair Avenue, Newark, left August 1 for Garret Point on Lake Winnepesaukee, N. H. Dr. Holler remained until Labor Day and Mrs. Holler and their daughter, Miss Helen Holler, who went there about the first of this month, are planning to stay until about the middle of September.

Dr. and Mrs. E. LeRoy Minard, of 140 Fourth Avenue, East Orange, have been enjoying a week-end house party of twenty guests given by Dr. and Mrs. Lester Powelle, of Portland, Me., at their summer camp near Intervale, N. H. Dr. and Mrs. Powelle were classmates of Mrs. Minard at Bates College, Maine. Dr. and Mrs. Minard also visited Camden, Me.

Mr. and Mrs. Edwin Kent Mitchell, of 55 Halsted Street, East Orange, have gone to the Adirondacks to spend the remainder of the season at the camp of Mrs. Mitchell's parents, Dr. and Mrs. Stephen Girard Lee, of the Halsted Street address.

Dr. and Mrs. Richard H. Dieffenbach, Jr., and daughter, Miss Ann Lee Dieffenbach, of 570 Mt. Prospect Avenue, Newark, have been automobiling to Lake Placid.

Dr. and Mrs. Edgar Holden, Jr., of 617 Mt. Prospect Avenue, Newark, are spending a month at Chatham, Cape Cod. Mrs. Edgar Holden, Sr., of 621 Mt. Prospect Avenue, is enjoying the month in the Pocono Mountains. Mrs. Graham C. Hunter of Fullerton, Cal., daughter of Mrs. Holden, Sr., is spending several weeks in the East, part of the time in this city.

Dr. and Mrs. Archibald Mercer, of 31 Washington Street, Newark, spent August on a trip to the White Mountains and Maine and also to the north shore of Massachusetts.

Dr. and Mrs. J. B. Morrison, of 97 Halsey Street, Newark, have been on a motor trip through New England and Canada. They stopped at several points of interest en route and returned to the city September 5.

Dr. and Mrs. J. Henry Clark, of 12 Walnut Street, Newark, are at Ogunquit, Me. They will be there until September 10 and will be joined later by their niece, Miss Anne Borden-Smith, of Maryland, who spends part of each winter here with them.

Dr. H. J. F. Wallhauser, of 170 Roseville Avenue, Newark, and Fred T. Terlinde, of 79 Shanley Avenue, are spending six weeks at Temagami, Ontario, near Hudson Bay. They plan to spend the greater part of the time fishing.

Dr. and Mrs. Herbert Foster, of 10 The Crescent, Montclair, have sailed on the Zealand to spend six weeks traveling in England and Scotland.

Dr. and Mrs. Robert H. Rogers and their son Robert, of 49 Ninth Avenue, Newark, have returned after being away about a month. They spent a couple of weeks at the Montowese at Branford, Conn., and the remainder of the time touring in the White and Green Mountains and in the Adirondacks.

Dr. G. Herbert Allen has returned to his home at 181 Roseville Avenue, Newark, after traveling abroad. He went the latter part of May from Montreal with the Post-Graduate Clinic Tour and visited France, Italy, Belgium and Germany.

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RACINE, WIS.

Dr. Mary E. Broadnax and Miss Edith Crane of 83 Lincoln Park, Newark, have been on a motor trip throughout New England.

Dr. and Mrs. James Spencer Brown, of 43 South Fullerton Avenue, Montclair, have gone to the Lake Champlain Club, Mallet's Bay, Vermont.

Dr. and Mrs. A. D. Cuskaden have returned to their home, 5902 Ventnor Avenue, Atlantic City, after an extended trip through Alaska, the Canadian Rockies and the western part of the United States.

Dr. and Mrs. William Harvey Cooke, of 303 Main Street, East Orange, have gone to their summer home at Shippan Point, Conn., to remain until the close of the season.

Dr. and Mrs. D. F. O'Connor, of Kingman Road, South Orange, are at the Ocean House, Watch Hill, R. I., for the remainder of the season.

Dr. and Mrs. Douglas A. Cater, of 55 Harrison Street, East Orange, have been motoring to New Harbor, Me.

Mrs. Richard J. Brown, of Newark, and family, of 311 Roseville Avenue, are spending the remainder of the summer at Hemlock Lodge, Lake Katchewan, near Richfield, Conn. Dr. Brown joins his family for the week-ends.

Dr. C. C. Allen, of Absecon, N. J., has returned to his home after spending a week in a Philadelphia hospital where he was under observation and is understood to be improving.

Dr. Anthony Ambrose, of 71 Congress street, Newark, is at his birthplace, Ashtabula, O. On his return trip, Dr. Ambrose will visit Niagara Falls and Montreal.

Continued on page XXIV.

# IDYLEASE INN

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Lowering the Blood Pressure with Liver Extract.—The effect of liver extract administration on blood pressure was studied in thirty-three cases. In these cases hypertension had persisted for varying periods. Physiological sodium chloride solution of extract of the liver was injected intravenously. Twenty-five patients experienced no disagreeable symptoms, most of them reported apparent relief. In eight cases there were reactions of varying degree, some of which resembled protein shock. There was an average fall in the systolic pressure of 62 mm., and an average fall in diastolic pressure of 28 mm. Investigations are under

way to determine the constituent or constituents of liver responsible for the effect on blood pressure. The clinical value of liver extracts will depend, not only on the development of a stable and uniform extract, but also on the permanence of the fall in pressure and its relation to other pathologic changes existing in the body. (Jour. A. M. A., July 18, 1925, p. 194).

### Non-Union Wages.

Fair Divorcee—What, only six dollar a week for alimony?

Judge—Yes, those are non-union wages.

**None but ethical advertisements wanted or accepted**



# Journal of The Medical Society of New Jersey

Published on  
the First Day of Every Month



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of the Committee on Publication

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## PRESIDENTIAL ADDRESS.

LUCIUS F. DONOHUE, M.D.,  
Bayonne, N. J.

Acting-President Medical Society of New Jersey.

(Delivered at the Annual Meeting, Atlantic City, June 19, 1925.)

In delivering the address that falls to the lot of the President of the New Jersey State Medical Society, I am filling the shoes of another, Dr. Archibald Mercer, who was elected President of your Society last June. I sincerely wish that Dr. Mercer might have found it possible to occupy the post to which he was elected, and I feel confident that all of you who know him, and the great interest he always manifested in the affairs of our State Society, join me in regretting that his resignation through poor health has prevented him from delivering the president's address, and from discharging the other duties of his office during the past year.

At almost every meeting of the county societies I have visited throughout the year, I have been "buttonholed" by some doctor or group of doctors who have advised me on the problems that particularly affected them. This association with the medical men of the state has been of great value to me, in that it has made me cognizant of the woes and troubles of both the country and city practitioner. From reflection, and through a careful study of their problems, in addition to discussing these problems with men of our profession whose opinions I value most, I have concluded that the following questions are most relevant for your consideration at this time.

The first and most crying need is a careful study of the cults. This may cause many to sit back, in the belief that the growth of their activities does not affect us. Let me say at the outset that the cults are at the present time engaged in treating all kinds of disease, and doing almost everything in the practice of medicine except using the knife.



How long this is to continue, no one can tell. It is possible to conceive that the next move of the cults will be to establish diagnostic clinics, or by confining themselves to physiotherapy keep within the law, so that it behooves us to join together in the education of the laity as to the real causes of disease. This is the age of "get together". The cults give us an example of united strength. In comparison with their numbers they make more noise than any other group, because they are out 100% strong in any campaign that they enter, whereas we only muster a corporal's guard when any concentrated effort is required to protect our interest. If we interested ourselves with one-half the vigor that they exhibit, it would not be necessary for us to be continually defending the medical profession. This seems like a truism, but no practitioner of medicine in this state does his full duty to himself, to the public, or to the school of his choice, whether he be a regular or a homeopath, unless he is alive to this evil and takes an active interest in the regulation of irregular practitioners.

There are many men whose ethics we deem unworthy, many who do not always follow the golden rule, but, unless we actually know that a qualified physician has been guilty of an infraction of the law, we ought to be in duty bound to use whatever influence we have to bring him into our county and state society. The professional man who is unethical is far more likely to become ethical by associating with ethical people, or by feeling that he has a good reputation to live up to, and is consequently less apt to need discipline if he is within our ranks. In many communities there are groups of men, usually the elders, who have acquired the attitude of wrapping about themselves the mantle of exclusiveness, and because of some wrong, either fancied or true, keep others out of the society who might better be converted to righteousness than to become worse and worse by isolation.

In the great fight which is before you, a fight for the inherited ideals of the profession, and in an endeavor to maintain our professional place in this state, we need every mother's son to be a member of our state society, provided he is not guilty, morally or legally, of violating the laws of state or nation.

### **Society Meetings.**

Especially should every effort be made to induce the younger men to join the county organization. Unless one joins a medical society and acquires the society habit as a young man, there is little hope of his trying to do this later on in life. All of you know how difficult it is for any of us to take on new habits of any kind after 40 years of age. It should be our duty when meeting a young practitioner to make the chief subject of our conversation with him an endeavor to show him the great benefits of membership in our organization. This may serve to keep him regular, and prevent his falling into unethical practices. For how,

otherwise, can it be expected that he will avoid the many pitfalls except by the bond of medical society membership. So, it is not only good business, but an excellent moral motive as well. There is scarcely an organization in the United States that secures for its members such service as does the medical society. Membership is conceded to be a great honor, recognized both by the laity and the courts. It is not only a commendation but a certification that in the judgment of his fellows he is fitted to belong to the great bond and union of the fellowship of medicine, and fitted to practice the art of medicine and surgery. To this may be added the educational value of the meetings, the entertainment of mind and body, and, in addition, there is the medical directory that brings him in close contact with his fellow members from the neighboring states of New York, Pennsylvania and Connecticut. We would also remind you of the value of the State Medical Journal, recording as it does the current trend of events, together with an excellent presentation of scientific papers by eminent practitioners. What other organization does so much at so little cost? The small state dues should be a stated annual January charge, and it should be associated in the mind of the member as a privileged financial obligation. If the dues are not paid, and escape our attention for 1 or 2 months, then it becomes extremely difficult for our hard-working secretary to print a full list of the members in the Annual Roster. Personally, I feel that a second notice to delinquents should be sent not later than 1 month after the bill is first due, and that it should be enclosed in a registered letter, so that anyone receiving such a bill would recognize that he is putting the society to extra expense and would send his check promptly. It is said the chiropractors pay 20 times as much as we do in society dues, because being laymen they appreciate the value of a large centralized fund. They have less hesitancy in paying one hundred dollars than many of us would have at paying five dollars.

#### **Methods of Carrying Medical Ideas to the Layman.**

The problem of selling our work to the laity for the benefit of the profession as a whole, resolves itself into bringing before the people, in the broadest possible manner, the ideals of the profession. They should have brought to their attention the progress of medicine and also the advance we hope to achieve for their benefit. What we need is not unethical individual advertising, but collective publicity, issued by medical societies. At the present time this seems feasible. This can only be accomplished by properly signed articles worded in a popular readable form. They might be written by the officials of the society or by someone designated by them, with the sanction and support of the medical society of the state. In addition they could be used for syndicating purposes. Much could be gained by having them printed in many newspapers throughout the state, or radio talks could be given by the officers

of the county and state societies, and by this latter method we should be able to reach a far larger audience than by means of medical articles in the lay press. This has been clearly demonstrated by a number of radio talks given by officers of the societies of our sister states. The only disadvantage of this sort of publicity has been the suspicion that propaganda is being broadcast for the personal advertisement of the doctor. As a matter of fact, this can be avoided if all broadcasting is carefully edited and passed upon by the local county society.

All of this propaganda in an attempt to educate the layman is in the last analysis the highest type of salesmanship. It makes the path of the irregular all the more difficult, because the profession is selling the truth. The more interest the individual layman takes in medicine, the greater becomes his demand for high class service. The present generation of physicians has not only greatly lengthened the life of the individual, through the prevention of many diseases, through research work, and practical elimination of preventable disease, but has actually increased the public demand for better medical service. How many of you, as children, had measles or other benign infections, and saw a physician; or when you gashed your hand, how often was a doctor called to sew up such a wound? More likely your parents made the diagnosis, with the aid of an old woman, who in turn gave you some hot aromatic tea, or in case of an accident your mother pulled down a cob-web and applied it under a rag or handkerchief. On the other hand, how many of your patients today will be satisfied with the old grannies' diagnosis of measles, or her treatment of a wound? The greater the knowledge on the part of the laity as to the cause and methods of prevention of disease, the greater the field of our service, thus creating an increased demand for medical attention.

This brings us to the subject of the medical education of the practitioner himself. The struggle for existence and the lack of time to do anything else except make a living, often makes us forget the necessity of continuing our medical education, and keeping abreast of the advances that are continually being made in the modern scientific development of improved methods in the diagnosis, treatment, and prevention of disease.

We are without a medical school in this state, but doubtless, in due time, the state will establish and endow such an institution for undergraduate instruction. Yet we are in a particularly favorable position in the matter of postgraduate work. We are well placed geographically between 2 teaching centers that are already disseminating instruction, and from these centers postgraduate instruction can easily be secured. The western part of the state is so near to the city of Philadelphia, that an arrangement with the University of Pennsylvania could well be made to obtain postgraduate instruction; whereas, on the eastern part the large cities should attract teachers from the New York side. Doubtless much



instruction might be obtained from our own men, yet the advantage of trained teachers is to be desired, at least during the inception of such a state program. This question of postgraduate instruction is fast taking root in our sister cities. Brooklyn has attempted to improve its situation, and Philadelphia is busy accomplishing the same results. The larger cities of the state might with advantage adopt a similar plan.

As to the country districts, why not adopt a plan not unlike that pursued in Pennsylvania, where certain teachers go to isolated communities 1 or 2 days a week, and discuss the latest findings in medicine and surgery. Such a service has great possibilities and is worthy of your serious consideration. Whether such teaching should be financed by the society or by individuals, may well be considered. At present, I believe, it would be best accomplished by groups of physicians arranging the matter among themselves. We should like to have an expression of opinion as to the feasibility of this idea. In all of the larger cities there is ample material in the hospitals for the highest type of instruction. I am quite sure that the schools would be only too happy to cooperate with us in this matter.

### Legislation.

In spite of the hue and cry that doctors should be active in politics, I believe it is well nigh impossible for the average physician to be active in this direction. Doctors have little inclination to include politics as a part of their profession. Medicine is a jealous mistress who brooks no interference, and if she be wooed by one whole-heartedly there is little room for her devotee to give his or her time to legislative functions. However, the doctor can at least voice his sentiments to his own representative in no uncertain manner, especially as regards constructive medical legislation. At no other time can we be politically active without giving offense to many people. While voting, as all good citizens should, we would prefer to maintain the same tolerant attitude in politics as in religion, realizing there is very little difference between those whom we think the greatest and those whom we think the least among us, when it comes to their exemplification or demonstration of honesty and real morality.

On the other hand, in matters pertaining to the profession, we must act as a unit and every member must feel it his obligation to use every means to induce the legislators to consider the laws from the medical viewpoint and also endeavor to have them take a personal interest in the efforts we are making for the benefit of the public. The attempts of your officers to accomplish the difficult service of keeping the profession informed is accomplished by placing the legislative activities before your eyes through our Journal and through the reports of the members of the Welfare Committee. It involves a large expenditure of time on the part of the few faithful ones, who in season and out of season go

to Trenton and, without any hope of personal gain, strive to prevent the tearing down of the structure erected to preserve the public health; a structure erected by generations of our predecessors, and which until the present, has been a model for the protection of the profession and public. The question as to whether we should have a paid representative for the society at Trenton during the legislative session is one that is ripe for consideration, but, whether this is accomplished or not, no member should neglect the opportunity to meet and know his own legislators, and every effort should be exerted to prevent the passage of destructive medical legislation.

### **Medical Advertising.**

Again and again someone tells us that because the physician does not advertise he is old fashioned in his business methods. Invariably the man who is a successful advertiser is a good student of human nature and would be a great success whether he advertised or not. One certainly sees this demonstrated in the ethical form of advertising which every doctor practices; the mannerisms, methods of working, methods of study, comparisons and discussions of his cases, etc., which everyone consciously or unconsciously practices. This is advertising, but of an ethical character. If one did not make an impression on people, none of us would arise from the commonplace. Let us follow the old methods. The pathfinders of medicine have kept the medical profession on a plane higher than that of any of the advertising professions.

### **Periodic Examinations.**

The modern movement for periodic health examination that has been fostered by the life insurance companies and proprietary firms, will in the final result bear good fruit in that it will unconsciously stimulate all of us to make more complete and better examinations of our patients. We may dislike the methods employed by the proprietary concerns doing this work, because of their mercenary manner, but nevertheless, they spread the gospel of good health in quarters that we could not reach, and every single convert makes the path of the irregular so much the harder. Whether the advertisers are honest in their propaganda or just fakers does not make any difference in results. These concerns, furthermore, teach the people regarding the minimum cost of such examinations even when made under the guise of charity mixed with service. When this is compared with the small fee that the family doctor receives, the laity will recognize that his family physician does much for which he is inadequately paid. These general physical examinations will also serve to impress the layman as to how well he has been kept in the past, at a comparatively small cost, whereas the general reexamination will make him quite willing to pay a fair fee for the service which was formerly given by his physician at too low a rate.

Finally, there will not be many discoveries calculated to alarm the

patient brought out by such a general examination by a good conscientious practitioner. Slight abnormalities, such as a deflected septum, bad tonsils, or bad teeth, may be noted but it is seldom that a patient is willing to have anything done to rectify these trifling conditions. Anyone who is asked to check over the extensive printing and typewritten notes of a well-known institute is aware that, aside from the legal, impressive-looking document, there is very little that has not been already known by the family doctor. It is true that his sympathy for the patient, and his knowledge of his previous psychology, has often prevented the family physician from telling him that he has a murmur which may be harmless, an old healed tubercle, or a similar inactive condition. This, the strange examiner greedily puts down. The patient naturally believes that his old family doctor was an old fogey, that only by the expert's examination was he saved from the dire consequences of a neglected lesion. In a sense this teaches the necessity of frankness and is probably a good thing for the doctor, as it warns him never to conceal any lesion just to save the patient's feelings. He should mention it by all means, and he should also remember that his very best and very dearest patient will often be delighted to state that by a general examination made at this or that institute he outwitted his family doctor. How many here have had this experience? Don't carry anyone's burden, as the best patient will never charge you with kind motives when a calamity occurs; they will almost to a man vote you guilty of neglect.

Making these yearly examinations begets the habit of doing all examinations in a thorough manner, and will make for more satisfactory and better work. Our society should continue to go on record as advising such examinations by the general practitioner. It is a question whether the society might not establish a fee so that there will be no misunderstanding and no question of undercutting rates; a maximum and minimum fee would cover all exigencies. The advisability of having part of the examination, including urine, blood, and x-ray of teeth and chest, done by a laboratory devoted entirely to this kind of work, might well be considered. Oddly enough, human nature does not rebel at a much larger fee when it is distributed, and when there is physical evidence of work done.

### **Juvenile Delinquency.**

It is recognized that juvenile delinquency is not only a serious hardship on the family, but also a rapidly increasing burden on the community. Corrective measures appear to be as much a matter for the medical scientist as for the courts. Coöperation between the courts and a medically trained psychiatrist seems the most feasible way of solving the problem. The medical expert can not only diagnose the class and degree of delinquency, but can also advise the court and social worker as to the real facts in each individual case and outline a definite plan of treatment that may be carried on in the home.



### **The Medical Expert Problem.**

The medical expert problem more particularly concerns the city practitioner. The frequent request to furnish expert testimony, just because one has attended the patient for some accident, as a method employed to dodge payment for experts' fees, and expecting the doctor to devote his time just because of friendship, is one of the blights that we must labor under. However, the crowning evil that brings discredit to the profession among the laity is the differences of opinion among medical experts, each of whom may be essentially honest, but each, unfortunately, may see the facts of the case from different angles. It would seem a simple matter for the courts to designate annually certain well qualified doctors from a list recommended by the county medical society for this service, just as they designate certain lawyers to act as masters, who by constant study of medicolegal problems become, as it were, truly impartial specialists on medicolegal matters, to act in an advisory capacity in our courts. Jersey justice is a term that is synonymous with sound thinking, prompt judgment and no frills. For the glory of our state, it seems timely that an attempt should be made to reach an understanding on this matter between the Bar Association and the medical profession.

### **Two Types of Doctors.**

There is a growing tendency in some quarters to bring into being a special type of physician who will devote all of his energies to the preservation of the public health, as opposed to the doctor who devotes himself to the personal health of the individual. Already the evidences of this division of service are manifest on every side. It must be our duty to prevent any clashing between these different fields of medicine. The public health exponent, who does not engage in practice, can see only the ideal of the healthy state and has not time or patience with the private physician, who strives to accomplish the same results but from a different angle. The private physician often feels that the seeming arrogance of the public servant is directed against himself and, because of his intense interest in his profession, is quite jealous of his prerogatives, whereas the public servant often misinterprets the motives of the family doctor, or has acquired the departmental manner which gives him the appearance of riding rough shod over his fellows. In this state we have been more than fortunate, because the public health physician is as a rule a general practitioner, and is able to see that the practitioner is a human being like himself.

### **Heart Disease.**

The next question which is looming large over the whole country, is the great prevalence of heart disease. In the prevention of heart disease, which is now showing so large a morbidity and mortality rate, the prime requisite will manifestly lie in the segregation of acute and infec-

tious fevers. It has been stated that rheumatic fever is the primary cause of 60% of all heart diseases, and its infectivity is generally admitted, especially as to children. The day is fast approaching when acute rheumatic fever will bear the same relation to infection that tuberculosis does in the infection of children. The prevention of the luetic form of cardiac infection has been materially advanced by the use of arsphenamin or its congeners and by the more general acquaintance by the laity with the preventive value of arsphenamin in many of the myocardial complications of syphilis. This knowledge has made the treatment of syphilis a much easier and far more satisfactory proposition than it was 2 or 3 decades ago. The arteriosclerotic forms of heart disease are still a menace inasmuch as basically they probably represent a series of acute and subacute infections. It seems as though the future prevention and treatment may be on the basis of bacteriologic origin rather than through metabolism.

### **Cancer and Diabetes.**

Likewise, the problem of the ever-increasing mortality from cancer and diabetes will loom large in the future, and these are fruitful fields of study. All of you must have noted the great increase in diabetes. Examinations for sugar were made just as frequently 20 years ago as they are today, yet the disease was a great rarity; nowadays it has become very common. The increase of cancer is unquestioned even after excluding the apparent increase due to longevity and increased acumen in diagnosis. But, at present, we can only hope for better results by early eradication through surgical procedure aided by x-ray and radium.

### **Conclusion.**

In conclusion, may I impress upon you the urgent necessity for workers in our society. The medical society cannot run itself; neither can it stand still. Someone must lie awake at night to plan and originate measures which will advance the interests of this organization. At times the cry of medical politics is raised, usually by someone who has never labored for the society's interests but who in a carping manner criticizes all of the proceedings. No society can thrive unless someone is on the job and plans the future. One may call this politics or society interest, or what not, but some of the members must have pride in the success of the organization, otherwise it will fail. Officials of your society welcome all workers. Anyone who has the society at heart will be welcomed to the council board but some evidence of a sincere interest must be shown. We must have workers on all of the committees. This brings up the subject of general responsibility because from such unselfish workers the officers should be selected. In fact, it is only from the rank and file of those who are always present at the meetings, and who are ready to serve on committees themselves, that one may hope to recruit loyal and satisfactory officers. We would be pleased to have any

and all of the members who have taken the trouble to come to this meeting act as a committee on membership for their county societies, and on the various local committees so as to infuse new life into their organization and to make the New Jersey State Medical Society what all of us hope to see it—the best and most efficiently organized medical society in these United States of America.

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## ACUTE DIVERTICULITIS OF THE COLON.

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Oration in Surgery, Medical Society of New Jersey,  
Atlantic City, N. J., June 19, 1925.

Left lower quadrant pain with nausea or vomiting in the male predicates diverticulitis of the sigmoid, while in the female, in whom this disease is of relative infrequency compared to the male, the same situation of pain may mean one of a number of diseases. In 1919 I presented a record of 27 patients operated upon for acute diverticulitis and today record 24 more, making 51 operated upon, of which 41 were males and 10 were females. Carnial stated that there are 2 to 3 males to every female. Of these, 2 had multiple attacks, 1 had had 2 distinct perforations, for each of which he was operated upon in a period of 13 or more years and the other had had 2 attacks, each being operated upon in a period of less than 3 years. The gangrenous perforations in each patient were in demonstrably different areas. Attention was called to the possibilities of repeated attacks in a paper read by me before the Buffalo Academy of Medicine Surgical Section on January 8, 1918, and published in the New York Medical Journal for June 7, 1919. My associate, Dr. Thomas Russell, also has had a case of second perforation which was likewise remote from the site of the first attack. These succeeding gangrenous attacks will of necessity call for very guarded prognosis as to the future. Prompted by the number of patients I have seen and operated upon for the acute condition, I feel no need of apologizing for again reviewing the literature as to causation, and expressing my individual views derived from clinical observations.

*Causation:* Much has been said as to the origin or cause of these protrusions. In searching for a reasonable cause for diverticulitis of the intestine, I am led to cite Dr. Edwin Beer's excellent paper in the American Journal of the Medical Sciences, 1904, entitled "Some Pathologic and Clinical Aspects of Acquired Diverticulitis of the Intestines."



This paper stands out as one of the best expositions as to cause of this disease. It is furthermore remarkable with what foresight Beer at that time announced his hypotheses as to the terminations. Among the contributors to the pathology, causation, etc., may be cited Graeser, Sudski, Klebs, Hartwell and Cecil. Graeser assigns the cause of the formation of diverticula to hernial protrusions which follow the emerging veins after taking a wandering course through the intestinal walls finally reaching the serosa. These conclusions were based upon 28 cases from which he made over 1000 sections. Sudski made a series of observations, contending that those of Graeser were at fault, being chiefly accidental. Klebs noted that the protrusions occurred in close relation to points of exit and entry of the blood-vessels in the intestine along the mesenteric attachment, and offered a series of explanations for these protrusions, chief among them being that the intestinal wall is weakest at the mesenteric attachment.

I am satisfied that the argument of Klebs is fallacious as in my series of patients operated upon and those patients in whom these protrusions are found, inactive, while operating for other causes, the most frequent site is that of the convex and lateral aspects of the colon chiefly in the fat lobules or epiploons and rarely found in the mesenteric folds. Further, Klebs' view of mesenteric traction acting as a tendency to weaken the wall, thereby being a productive factor, appears to me to bear little weight. Old age as a factor is disproven by Ashurst's patient, a boy of 7; 2 cases of Hartwell and Cecil of 7 and 10 years; 1 of my own, a boy under 7 years; and numbers of the patients used as material for this article, under 40. Ransohoff, *Annals of Surgery*, 1913, reported occurrence in 2 children and called them perforating sigmoiditis and perisigmoiditis.

Finally, Hartwell and Cecil in summing up the etiology of this disease, after considering the various theories and arguments, apparently were forced to make the following statement: "We therefore are driven to the conclusion that up to the present time no complete explanation of the primary cause of intestinal diverticula has been offered. The most that can be said is that for some cause, a weakness exists in the intestinal coats, and that by reason of the weakness a pouching of the coats takes place when undue pressure arrives." I am inclined, from my clinical experience and from x-ray observation, to the conclusion that they are of congenital origin. Reference to the literature and my own observation produce sufficient evidence of the fact that the entire alimentary tract from the esophagus to and through the rectum is liable to diverticula. During the past 4 years, I have operated upon 2 patients with duodenal diverticula, 1 gastric, 2 or 3 of the gall-bladder and several of the appendix; 1 of the appendix in a child under 2 years of age. Also several instances have been observed, during various abdominal operations, of diverticula scattered through the lesser intestine.

In the patients with acute manifestations, one finds some food or fecal content in the pouch involved, leading one to believe that these foreign bodies act in the same productive manner as do the foreign bodies that are found in the appendix. Diverticulosis today is a well established disease, at least roentgenologically if not symptomatically or clinically, and requires but the onset of pathologic process of one or more of the protrusions to become a definite clinical entity.

*Classification:* While various classifications as to false and true, acquired and congenital have been in vogue, that of true in which all coats of the intestines are present and of false when 1 and usually 2 coats are absent, are the most popular and desirable for a working basis.

*Pathology:* The pathologic conditions found may be the same varieties as we have types of appendicitis; from a simple catarrhal, better called acute, to the types of exudative and occlusive changes and of ulcerative to gangrenous and perforative evidence. These may or may not all be accompanied by, or rather, followed by, exudative to true abscess formations and finally the acute processes may recur or never resolve and a malignant change eventually may arise. These malignancies are reported frequently enough to give some weight to the possibility of an implantation of malignancy upon a former simple inflammatory growth. Nevertheless, in my series of patients with this disease, while I have found malignancy in 4 or 5 of this series, I cannot feel but that the malignancy is not a result of but a coincident condition, reserving the thought that a malignant implantation at the site of a prolonged irritation is always possible. In many of these patients we have a low grade of infection proceeding finally to a marked thickening and new growth that will resemble malignancy first in its symptomatology as to partial or complete obstructions and by x-ray be so confusing at times as to demand exploration for a positive diagnosis by the microscope. One of the most frequent complications in the acute type is abscess formation with adhesions to a hollow viscus and perforation. This occurs most frequently in the bladder. I have seen this complication in 5 patients in my operative series and in 1 patient not only was the bladder perforated, but a contact portion of the sigmoid was perforated and 2 perforations of the ileum also were present. Recently I saw a patient on the eleventh or twelfth day of his disease with a one-half inch perforation into the posterior wall of the bladder, passing a most foul fecal mixed urine. On exposure by operation on the fourteenth day of his disease, 2 perforations in the sigmoid were in contact with the bladder perforation. On 2 occasions I have seen high perforations in the rectum producing ischiorectal abscesses, the origin of which in each, I feel satisfied, was from a gangrenous diverticulitis, both having a history of sudden onset of pain, with the subsequent formation of the abscess.

That nonoperative recovery takes place in patients at times cannot be disputed any more so than in patients with appendicitis definitely evi-

denced by symptoms but who also make the positive nonoperative recovery. During the past 3 weeks, I removed 10 inches of the sigmoid in a male 54 years of age, whom I saw 3 years before in an acute but subsiding attack and who has been seen at various times during these 3 years by his family physician for mild attacks; his fourth attack requiring operation, was followed by a large mass formation in the left lower quadrant, encroaching upon his hypogastric zone and upon exposure not only was a marked amount of thickening and obstruction evident, but 3 large pockets of foul pus were evacuated.

*Symptomatology:* Formerly we were led to believe that we had an appendicular attack in the left side due to the terminal portion of the appendix extending across to the left or that there was a transposition of the appendix with infection. While these cases, particularly the former type, do occur, we are able now to definitely diagnose these involvements as of the diverticula in the greater number of instances. The symptoms and signs are allied to the various types of appendicitis, such as the fulminating, where pain in the left lower quadrant rapidly spreads over the abdomen, the pulse and temperature keeping pace with the invasion, abscess formation as in appendicular abscess, definite pain on pressure and finally mass or tumor formation. Eventually, if not operated upon, the following terminations are in order: resolution rare; perforation into a surrounding viscus, the bladder most frequently; ischiorectal abscess and, in the event of nonresolution or nonoperative interference, thickening of the gut wall and surrounding fat takes place so that obstruction of varying degree results. In the fulminating type, it may be that one must hide himself in the diagnosis of "an acute abdomen", and explore. The diagnosis as before stated is in women difficult at times, owing to the presence of the tube and ovary and many diseases of these structures are very much allied in their symptomatology to acute diverticulitis.

In the subacute variety, we often have a state of subsidence to favor the x-ray diagnostician in helping us out. In the very low grade type, with marked infiltration, the patient presents the occasional evidence of obstruction in mild or incomplete form and no evidence of blood or mucus as in carcinoma; while with proctoscope up to its length one can eliminate carcinoma, at least in those patients in whom carcinoma starts in the mucosa, recognizing the fact that a very minimal number of cancers of the sigmoid or colon ever arise outside of the mucosa. I have no recollection of ever seeing the mucosa of the colon involved in a case of diverticulitis. The opposite obtains in malignancy. Proctoscopically, I can conceive of no more difficult bit of work than that of seeing the openings of the majority of these conditions, yet can conceive of the accidental exposure of a relatively small opening and the opening in a large diverticulum in which the mouth is also large.

*Diagnosis:* In making a diagnosis of this condition, the general



aspect, age, etc. of the patients is to be considered. We find the majority of these patients are short, stocky beings, well nourished and of the overweight make-up usually in the fourth or fifth decade and giving a history of some dietary indiscretion, as is also so often noted in taking a careful history of appendicitis. The youngest of my patients was under 7 and the oldest 81, both male, while the majority were 40 to 48 years of age.

The onset symptoms are pain in the abdomen, more definitely located early in the left lower quadrant than the localization in appendicitis. There is nausea or vomiting, temperature and pulse rapidly ascending in the scale, with the concomitant tenderness on pressure in the left lower quadrant varying from the usual iliac fossa area to the midhypogastric zone. Blood examination gives the typical picture of an acute infection. Rectal evidence will vary as to the site of the involvement; if high up in the sigmoid, little or none; while if in the lower segment of the colon, ample evidence by the finger is detected, being chiefly pain the first few hours, then mass. Again, if the area involved be in the midsigmoid area, sufficient mobility being present, one may get the evidence by combined rectal and suprapubic pressure.

The greatest difficulty in making a positive diagnosis prevails in cases of perforated malignancies, as in these patients, owing to the perforation, we have an absorption or infection temperature and a tumor or mass in both the malignancy and the infection. A carefully taken history will often bring to light in the carcinoma patient, evidence of occasional pain, colic, constipation, loss in weight, blood or mucus in stool, and may show by blood examination, a distinct secondary anemia. When possible to use without danger to the patient, the x-ray will frequently be a great aid, bearing in mind the possibilities of both diseases being simultaneously present.

*Gross Pathology:* Upon opening the abdomen, the picture of the intensity of the process varies; noninflamed diverticula are seen protruding from all or rather any surface of the gut. They are bleb-like, resistant to the sense of touch, and may or may not present evidence of foreign body content. The acutely inflamed type varies from a markedly injected diverticulum or epiploon to one distinctly gangrenous. In the majority of patients operated upon by me, one or more of the epiploons were found involved. These tabs of fat, epiploons, were either extremely hard and intensely injected or in varying stages from hemorrhagic to gangrenous involvement. On section of the epiploon near its base or at the base, a diverticulum is usually found. These bodies or pouches are round or oval and range from the size of a small seed to that of an olive, the average being about the size of a pea.

The resected colon when opened presents the appearance of a healthy mucous membrane thrown into folds and here and there a crypt or long opening into which probes of varying size may be introduced,

some openings readily admitting a pea. In a number of these pouches, round foreign bodies are present which prove to be fecal concretions. The wall of the colon in chronic cases is thickened, the lumen is diminished and the intestine quite frequently densely bound to adjacent structures. McGrath has shown that the majority of the diverticula are of the false variety and that the mucosa is pushed through the muscularis in the region of the penetration of vessels.

In sharp contrast to this picture, is that of the colon on section in cases of malignancy. The mucous membrane is destroyed, a deeply excavated area in the intestinal wall exists with hardening of the tissue about it and the lumen irregularly compressed by the growth if not completely annular and if annular the opening is diminished, as the growth increases, very similarly to the closing of the diaphragm in a camera. The intestine contains a slouching, foul-smelling, bloody material. In the cases (diverticulitis) reported 2 were of the cecum, 1 in the vicinity of the ileocecal valve and 1 at the beginning of the ascending colon.

I will again call attention to the statement and fact that operation does not predicate a clean bill of health from the disease as in 1 instance over 50 diverticula were demonstrated by me in 5 inches of a section of sigmoid removed for cancer, while in all the other patients in whom careful search was made numbers of diverticula were found not involved by inflammation. Two of my patients previously recorded, having definite attacks and being operated upon the second time, are also undeniable evidence of the possibilities of repeated attacks of this disease. A guarded prognosis as to recurrence is naturally necessary. These 2 cases make a 4% record of repeated invasions in my series. Some of the earlier reports of long cures of cancer by resection must be taken less seriously at the present time and considered as diverticulitis cases. I can plead guilty to reporting 1 such patient, a female operated upon by me 16 years ago, for obstruction supposedly due to carcinoma. The entire pelvis was filled with a hard nodular mass; there was no fever; complete obstruction existed. A sigmoidostomy was done. In the course of 2 years all movements were by the rectum except slight leakage through the now contracted sigmoid anus. This patient is reported well and hearty as late as March, 1925.

*Prognosis:* In the acute cases with early operation prognosis is good, while in the chronic with resection it is equal to that of all ordinary large intestinal surgery of relative intensity.

*Treatment:* The acute abdomen presents but one solution to me in all patients where no cardiac or renal contraindication exists, and that is early operation. One should no more wait for resolution in an abdomen of the acute variety, in this disease, than in an allied condition due to appendicitis or pus tubes.

The habit that some operators fall into of waiting and iceboxing

their patients in the acute abdominal cases may bring about the occasional good result, but most frequently the results show the evidence of pernicious or ignorant delay or evidences of poor observation. Personally, I have never seen the bad results reported in delaying operation for the acute pus tube any more than I have for the acute appendix cases or in ruptured tubal pregnancies, but I heartily condemn delay and applaud early action of the surgical variety. Where one has the chronic type to contend with, no hurry is demanded as these cases rarely become positively obstructed but often become partial. Here, over activity may be subjugated to treatment, dietary and medical, and it has been shown instead of a resection at times, that an artificial anus proximal to the obstruction will work wonders in allowing absorption to take place in the thickened portion so that eventually the channel has almost reached normalcy, whereas in other instances resection of a portion will be necessary. This is frequently best done, and with the lowest mortality of all operations, by the Mickulicz procedure. End-to-end suture has a greater life hazard than the former operation, while the side-to-side anastomosis type of operation is to be avoided in practically all of these patients.

To return to the acute cases, we have several types to consider in the early acute. In those before mass formation, attempts at repair of the perforation are in order and meet with great success. In the variety, where abscess exists, liberal drainage and attempts at repair when feasible, otherwise liberal drainage only. A fair proportion of these 2 varieties of cases after operation may and will present a fistula for a few weeks to months. The fistula is invariably a small caliber one, is easily taken care of, and need cause no alarm as healing is the rule. Several of my patients have gone about for a few weeks, to 4 years in one case, and eventually all healed. During this time, i.e., between the establishment and cure of the fistula, only an occasional visit to the surgeon, to attend to granulations, is necessary.

In the acute variety that exist between the plates of the peritoneum in the mesentery, it has been my custom for several years to split the peritoneum on both sides parallel to the vessels so that freer drain will occur from the fat mesentery, and less of that most vicious of all forms of absorption, a retroperitoneal lymphatic, may take place.

*Summary:* Diverticulitis is a disease of the left lower quadrant usually but may be anywhere in the length of the colon. It occurs chiefly in males between 40 and 50 years of age, but children are reported also. The patients are usually of the well-developed make-up, short, fat and over weight. About 1 female to 4 or 5 males. All acute cases should be operated upon although known that subsidences and cures of attacks take place as in other infective processes. All chronic cases may be observed until obstructive symptoms show.

*Diverticulosis:* The condition of diverticula being present in the intestine merits no greater attention than the presence of the appendix



or gall-bladder does except that there are multiple diverticula and 1 each of the appendix and gall-bladder; therefore, ordinarily the chance of acute diverticulitis should be greater but the clinical evidence shows that this disease is far more rare today than that of the gall-bladder or the appendix.

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## CONDUCT DISORDERS IN CHILDREN.

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Within comparatively recent years there has come into being a rather new type of children's clinic, which, for want of a better name, we call a "Child Guidance Clinic".

The purpose of these clinics is to aid in reducing the appalling amount of mental disease and defect which we are encountering in the medical world today. Insanity, or "mental disease", as we now endeavor to call it, has always been with us. Mention of this disorder is frequently met with in the Bible and in the writings of Egyptian and Greek historians and essayists. The ancient Greeks and the Romans knew much concerning the causation of mental diseases and practiced rational therapeutics in the treatment of them. With the fall of the Roman empire medical knowledge, particularly in its relation to mental disease and defect, sank to abysmal depths, and theories of demoniac possession and the like held sway (even in medical minds) until the end of the eighteenth century of our era, and the sufferers with these mental afflictions were subjected to the grossest cruelty and medical neglect. Pinel, in France, and Tuke, in England, and Benjamin Rush, in Philadelphia, were among the first to break the chains of ignorance and superstition regarding the cause of insanity and to institute reforms in the treatment of these unfortunates. Since that time, there appears to have been a very great increase in the number of mentally diseased among our population, but in reality the numbers have not actually increased, because comprehensive medical study of our population has revealed more and more the existence of real mental disease among people who heretofore were considered as being "unusual" or "queer", thus giving rise to the belief that mental disease was on the increase.

Long experience had shown that mere hospitalization and custodial care had been of practically no value in reducing the incidence of the disease or in curing the patient. The next step forward was the establishment of real psychopathic hospitals where real cases of mental dis-

ease were exhaustively studied and treated. In this type of hospital the percentage of cures was infinitely greater than in the old style "asylum" but even here the incidence of the disease was not reduced. In order to get at the source of the trouble it was seen that the disease must be treated before the conflagration had passed beyond control, hence the establishment of "child guidance" clinics as one means of prophylactic therapeusis on soil predisposed to mental derangement.

"Mental hygiene" is an expression which has come into being along with this newer movement which I have mentioned. The "National Committee for Mental Hygiene" which was established in 1909 has done much to spread the propaganda among the lay and medical public of the world. It was organized to work for the preservation of mental health by endeavoring to prevent mental and nervous disorders and mental defects and to help raise the standard of care and treatment for those suffering from any of these mental disorders or defects, including delinquency, dependency, immorality, conduct disorders and the like. This movement had its initial impetus through the efforts of Mr. Clifford W. Beers who at one time was himself a sufferer with mental disease. He spent 3 years in hospitals for the treatment of his condition and eventually entirely recovered.

At the present time, in Philadelphia, there are several mental hygienic or child guidance clinics, among which is the large clinic at the Philadelphia General Hospital in charge of several psychiatrists, one at the Philadelphia Hospital with Dr. Strecker, and the smaller one at the Children's Hospital under my care. During the past year further impetus to this preventive psychiatry movement was furnished by organization of the Pennsylvania Committee on Mental Hygiene, of which Dr. Charles Frazier is a sponsor. There is now established in Philadelphia a demonstration child guidance clinic which is being used, as its name implies, to demonstrate to the community at large the usefulness of such a clinic. Such clinics have been in operation in New York, St. Louis, Los Angeles and Boston for several years past.

With what type of child does this guidance clinic endeavor to deal primarily? For the frank mental defective, the idiot, the imbecile and the low grade feeble-minded, this clinic is not intended to function except as a side issue, as experience has shown that when you are dealing with a marked quantitative mental change the results from any treatment are negligible. The children whose behavior is out of the ordinary, either because they do unusual or "queer" things or because they are overactive and nervous, or underactive and seclusive, or show disorders of behavior are the types for which this clinic endeavors to function. This type of child, exhibiting qualitative changes, is the potential insane man of the future and by correcting his environment in his formative years we endeavor to prevent a mental calamity happening in later life. These abnormal or "conduct children" that exhibit temper

tantrums, excessive nervousness and extreme sensitiveness, cruelty, lying, stealing, seclusiveness, school difficulties and other maladjustments are our chief concern. Behavior disorders, which, at the onset, are of little moment, frequently develop into delinquency and criminality of the worst type. Consequently, by treating these behavior disorders in their incipency we hope in some slight degree to reduce crime. This may appear as an Utopian thought to many but it is at least very well worth trying. Behavior disorder is frequently but an indication of serious underlying difficulties which may be physical, mental or social.

Children of preschool age furnish the most fertile soil for the corrective possibilities of such a clinic. Furthering the formation of habits that will tend toward the proper development of the child and its best interests, in determining as far as possible the basis of undesirable habits and instituting proper training and treatment to overcome such habits, is our aim. In brief our objective is the healthy development of the mental aspect of the child's life, beginning at a time when methods of prevention rather than of cure can be utilized. A "problem child" is one who is struggling with some undesirable habit or who is finding it difficult to adapt himself and face his everyday childhood problems in a normal healthy manner. Such a child constitutes an economic hazard to the home and the neighborhood in which he lives. He demands and usually obtains a tremendous share of his parents' time, money and attention to the neglect of the other children and their consequent jealousy, envy, and resentment.

Why are there abnormal children? The question is not difficult to answer. Heredity is by far the most frequent and the most potent cause. When one remembers that in this country 1 person in 266 is mentally diseased, 0.5% of our population is mentally defective, and that 52% of all the hospital beds in the State of Pennsylvania are for mentally ill persons, is it little wonder that we have problem children with us? But environment, or the soil in which they grow, also plays a very great part as to how their minds and bodies shall develop. The old adage, "The fruit does not fall far from the tree", is forcefully true as showing the effect of heredity. On the other hand, the old fable of the 3 pine tree seeds, in which one falls upon the forest floor, the second at the edge of the forest, and the third upon the open verdant meadow, with the consequent development of 3 very different looking types of pine trees from the same type of seed, may be taken as an apt parable as to the effect of environment on the mental and physical growth of man. As to specific causes, it is known that drunkenness and epilepsy in the parents contribute to degeneracy and delinquency in the offspring. Syphilis is a most deadly enemy to the upward progress of the human race. The prenatal physical condition of a mother is frequently the cause of mental defect in the offspring. The influence of maternal impressions has long been a subject of much dispute but it is



the concensus of opinion that they are of negligible moment in causing congenital defect. Violent emotion, particularly fright, in the mother during pregnancy may, through an endocrine disturbance in the mother, cause damage to the growing fetus and consequent mental or physical deformity at birth. Head injuries at the time of birth are frequently causative factors. Ignorance of the mother in her postnatal care of the child is the cause of disordered mental and physical growth in many instances. Insufficient and improper feeding in infancy, with the occurrence of infantile convulsions, frequently produce organic changes in the brain and consequent mental disorder. Acute febrile diseases in infancy such as measles, scarlet fever, whooping-cough and the like frequently leave their impress upon the brain of the little victim. During the past few years the disease which we are wont to call epidemic encephalitis or lethargic encephalitis or "sleeping sickness", by its destructive action upon the brain cells, has caused many children, otherwise normal, to change into vicious personalities and exhibit other behavior reactions. An illustrative of this latter type, I remember a little 5 year old colored child who had been perfectly normal in all respects until she developed an acute encephalitis for which she was treated at the Children's Hospital. After the subsidence of her acute symptoms her mother noticed that she had become disobedient and maliciously destructive. She would pour oil upon the kitchen floor and set fire to it. She tore everything to pieces that she could lay her hands upon. She poured water and vinegar in the receptacles containing salt, sugar, flour and the like, and she developed a desire to walk around the outside of the house upon the narrow ledge above the first floor store cornice, with no apparent regard for the danger in so doing. Fortunately, maternal care and instruction reëducated this child and she is now practically normal again. As another example, there was a fair haired, blue eyed boy of German descent, 9 years old, who acquired the same disease, which left him with a character change in which he became so obscene and blasphemous to his teachers and the other pupils in the Catholic school which he was attending, that it became necessary to remove him from school and practically isolate him. This little patient developed the characteristic habit of staying awake all night and wanting to sleep most of the day. Unfortunately, treatment extending over the past 2 years has up to this time proved unavailing in effecting a cure.

As to actual causative factors, the report of Blanchard and Paynter<sup>5</sup> in Child Guidance Clinic No. 1 of the National Committee for Mental Hygiene, is very illuminating. Of 250 problem cases extensively studied by them, they ascertained that in 55%, environment, particularly bad home conditions, was a most potent factor. Personality difficulties were a paramount cause in 51%, psychopathic heredity was discovered in 46%, poor physical condition in 33%, mental defect in 59%, endocrine disturbance in 15%, early illness in 14%, early injury in 4%, speech

defects in 4%, and syphilis in 2%. It is noted that many of these percentages overlap because there is generally more than one factor to be considered in each case.

Psychopathic heredity and bad home conditions are most frequent causative factors. When one of them is present we are very apt to find the other, and from their interaction there are very apt to spring personality defects. The parent who is mentally deficient or nervously unstable is manifestly unfitted to guide a psychopathically predisposed offspring through the pitfalls of the formative years of life. A child is very impressionable, is quite prone to believe what he is told, and is imitative to such a degree that his thoughts and actions are frequently but reflections of the actions of those nearest to him, and when these actions are of a psychopathic type, their pernicious effect upon the child is inevitable.

It is rather difficult to classify the various types of conduct disorders that we encounter, but Blanchard and Paynter<sup>5</sup> have devised a very workable classification of types of children exhibiting various personality difficulties. They describe the neurotic and the psychopathic child, and also the seclusive, hypokinetic, hyperkinetic, emotional, egocentric, and inadequate personality types.

The seclusive type is very frequently met with and includes those shut-in personalities that do not mingle with others readily but prefer to play by themselves and frequently resent the intrusion of the company of other children. They are excessively timid, reserved, and sensitive, and their condition is frequently the result of a feeling of inferiority. This type of personality is frequently found in those who develop dementia praecox in later years. The very opposite to this type is the hyperkinetic or hyperactive child who is inherently restless, talkative, boisterous, and frequently rude and impertinent. This condition is very often tied up with hyperthyroid activity. As a rule, they are much easier to deal with than a seclusive child and they are less prone to develop actual psychoses, although a condition of actual mania is occasionally the goal that they achieve. The hypokinetic child is apathetic, lacks energy and initiative both mentally and physically, but is not particularly seclusive. As a rule, they fatigue easily and frequently show evidence of causative underlying physical disabilities. The neurotic group comprise those who are fearful, indecisive, have frequently changing physical complaints, and develop nervous habits such as sleep walking, bed wetting, night terrors and so forth. They are the children who are the potential neurasthenics of the future, exhibiting a typical syndrome of irritable-weakness. The emotionally unstable type is somewhat allied to the hyperkinetic. They do not react normally to everyday situations in life. They are either emotionally exalted or depressed. They are ultrasensitive, and apt to exhibit temper and tantrums, and are very difficult to reason with. The egocentric child is frequently a

product of indulgent, judgment-lacking parents. As the name implies, he is self-centered, stubborn, selfish, conceited, vindictive and cruel, and generally a coward. Because of the physical conflicts these qualities cause, this type of child is frequently in difficulties at school and in his social life, and is occasionally ostracized from the society of his companions. The inadequate personality type is generally concomitant with mental defect. They are lacking in judgment and are generally unable to fight the battle of life in the environment in which they live, either among their playmates at school or among their fellow workers in their later years. This brief description of the various types, which is essentially that formulated by Blanchard and Paynter, will give you some idea of the most common types of children exhibiting behavior disorders that we encounter in a Child Guidance Clinic.

I will quote a few cases as showing some of the types of behavior disorder in children as noted in the clinic of the Children's Hospital and in those of some of my confrères: Dr. Franklin G. Ebaugh reports the following interesting cases: (1) "H., a boy, aged 6, was referred from school because he was wilful, stubborn, and hard to train. Physically he showed slight undernourishment. While in the clinic he demanded considerable attention from his mother and it could be readily seen how he controlled the situation. A general resumé of the case is as follows: He never felt hungry, and it was necessary for his mother to force him to eat. He existed chiefly on a very abundant and irregular candy diet. He stole pencils from other children. He had frequently temper tantrums, lying down and screaming when asked to perform some unpleasant duty or when a meal was put before him. He was very remorseful after these attacks. He was very restless at night and had to be reminded to go to the toilet, and he was untidy. As early as the age of 3 years his main diversion was throwing milk bottles at other children. Treatment for this lad had to begin with the reëducation of the parents, to try to establish insight into their boy's problem. They were to try to ignore his temper outbreaks. A change of environment during the summer months was effected by sending him to a boy's camp. A sensible dietetic and sleeping routine had the desired results. Following this, the boy showed marked improvement at home. It was necessary, however, to send him to an orthogenic backward class. Later he improved and was placed in the regular school. The ultimate outlook for an excellent adjustment is good."

(2) "S., a girl, age 4 years, with one hand deformed, was in the kindergarten. Her teacher reported that she was very nervous, continually sucked her fingers and frequently pulled her hair out of the back of her head. The teacher tried various methods of breaking her of these habits but was unable to do so. The child attempted at all times to attract the teacher's attention. The mother stated that the child had always been sensitive concerning her deformed hand. She attempted



to comfort her by saying that she was born that way and should not worry about it. The hand was a curiosity and the school children often asked the patient to show it to them. She became very sensitive and began sucking her fingers and pulling her hair. At home she was extremely irritable when with her older brother. Examination in the clinic revealed marked chronic tonsillitis and aplasia of the phalanges of 4 fingers of the right hand. Her intelligence quotient was 121. She was considered a precocious child and trainable. Her behavior abnormalities were largely due to the marked attention and curiosity of the older children concerning the deformity of her hand. Her craving for considerable attention from the teacher was a reaction to teasing by girls in the kindergarten, who frequently jeered, 'Just look at her right hand'.

"Corrective modification consisted in ignoring her behavior abnormalities, less attention in school, careful discipline both at home and at school, encouragement to disregard teasing, and a frank talk with the child concerning the deformity of her hand. In this talk she indicated a feeling that she must be different from all the other children."

As another example, there was a girl 10 years of age who was brought to my clinic at the Children's Hospital in October, 1924. Her mother stated that the child had had various tics of the shoulders, neck and face, particularly blinking of the eyes. She had always been a nervously unstable child and was constantly either emotionally depressed or exalted. The most interesting phenomenon was that every evening, soon after the parents had retired for the night, the child would have a "chill", characterized by violent trembling of the body and chattering of the teeth. The patient would call in to her parents, "I am shaking", whereupon one or the other of the parents would go into the child's room and stroke her head, or she would be permitted to come and get in bed with her parents. As soon as the child had contact with her parents, the shaking would immediately cease. It developed that this trembling was a subconscious effort on the part of the child to obtain concrete evidence of parental affection. The history was that, some years before, this patient had been the subject of an incomplete criminal assault having been siezed and carried up a dark alley by a negro who was immediately frightened away before accomplishing his object. This occurrence had shocked the child greatly and had been the cause of the parents showering extraordinary attention and fondling upon her at that time. These attentions on the part of the parents soon diminished as the next younger child, 4 years the patient's junior, was the constant object of the parents' particular love and attention. One night the patient had a real chill, which caused much concern to her parents and ever since that time the patient had developed a nightly trembling of the type described above. It was quite a simple matter to explain the mechanism of this condition to the parents and the "chills" within a short time completely disappeared.

Dr. Samuel Leopold, of the Municipal Court in Philadelphia, reports the following 2 cases, as showing how lack of parental judgment may cause behavior reactions in children:

(1.) "One little girl showed no fear with the home group, but would cling to her mother and scream loudly whenever any visitor came into the house. The case came to our attention and in looking for the cause of this unusual conduct we found that the mother had been in the habit of threatening to 'give her away to some stranger', as a method of controlling the waywardness of the child. Thus, to the little girl's mind, each visitor who entered the house might be the dreaded one who would take her away from the safety of the home."

This child learned that she had been deceived and her confidence in her mother and in all other authority was badly damaged and distrust of the sincerity of threats and promises might become a fixed characteristic of her later life, keeping her always on the defensive, even with her friends. Many of these conduct reactions result from the lack of common sense management on the part of the parents.

(2.) "A certain little boy did not like to go to school and would stay away from it whenever he could manage to do so. An investigation of the cause revealed the fact that the other boys called him 'Sis'. This, it was ascertained, arose from the fact that one day when his shoes were being mended, his mother had made him wear his sister's shoes. The boys at the school had found this out and given him the offensive nickname. Sometimes this feeling of inferiority develops unaware of the parents."

(3.) Dr. Macfie Campbell<sup>3</sup>, of Johns Hopkins Hospital, quotes a few examples to show how simple problems of childhood may be handled: "A girl of five refused to go to sleep unless her mother was with her. She would not sleep if she knew that her mother intended to go out. If the mother sat down to read the paper, the child would sit up in bed and keep awake to make sure that her mother did not go out. As the mother could neither go out, read, nor continue her work under the decree of this dictator, she solved the problem by going to bed about the same time as the child."

In many cases the mother of this nervous child tells how she had to rock the child in infancy for hours, had to sit beside the child, had to accept many conditions imposed by the child. But in the majority of these cases she had to do it because she could not stand the displeasure and protests of the child and preferred to gain peace at the moment rather than to establish the child's sleeping habits on a good hygienic basis at the price of a transitory period of friction.

"The 5 year dictator mentioned above objected to nearly all food except sweets. If crossed, she pulled her hair and stamped her feet.

She teased her little brother and objected to her mother's paying attention to other children." The development of this unlovely personality was due entirely to lack of parental judgment and discipline.

Not infrequently children have the knack of vomiting when urged to accept a suitable diet. This is rather disconcerting to the parent, who is liable to surrender, but a parent conscious of the important issues involved will soon eliminate this mode of reaction.

In regard to the importance of the mother's conduct in producing abnormalities in children's behavior, I will quote a case by Dr. Douglas Thom<sup>4</sup> of Boston:

"A little girl, aged 3½ years, was brought to the clinic because of terrifying dreams, an intense fear of dogs, and extreme shyness. It was only after the third visit to the clinic that the mother herself threw much light on the origin of the child's fear of dogs. She stated that when she was about 18 years of age she herself had a rather terrifying experience in being chased by a dog and this fear had persisted for a long time. Remembering her own fear of dogs, she had felt that it would not be a bad plan to instill this same fear in her child, and for months past she had frightened the little girl, when she was disobedient, by threatening to go and get the dog, and when out on the street with the child, she always pretended to be afraid when dogs were present, although she had actually overcome her own fear. By instructing the mother and giving the child a proper attitude toward the animals, this fear was soon banished and the terrifying dreams ceased without any further treatment. The child is still very shy, but is making contacts with other children and the prognosis seems good."

A very different type of abnormal child, but who is nevertheless manifestly abnormal, is the genius and he suffers as much from misunderstanding by his parents, teachers, and doctors as does the inferior type of child that I have heretofore spoken of. He is preforce of a higher degree of intellect than his parents and associates. Our modern school system gives no aid to this type of child and as a consequence these unusual beings who have contributed much to the very best of our literature and science, frequently break mentally in late adolescence, due primarily to a lack of understanding of them on the part of their associates. A psychologic understanding of their mental mechanisms by the medical profession at large will do much toward preserving the mental health of children of this type whom they may come in contact with in their general practice.

In retrospect, let me remind you that the usefulness of a child guidance clinic is necessarily quite limited. Many cases cannot be helped at all, as it is obviously quite impossible to change the anatomic construction of a brain. Some few cases we may even permanently cure. The majority of cases, however, we can aid to such a degree



that their ensuing earthly life may at least be a pleasure to themselves and to the community, and some few may be saved from a career of criminality. It has been said, and with truth, that there are 3 types of people born into the world. There are those that are so strong that no amount of stress or strain will injure them. Obviously these will never have need of our clinic. Then there are those that are born so inherently weak that the least stress or strain will break them. It is obvious that we can do nothing for them. But, fortunately, the "ordinary garden variety" of human being is of the middle ground—of the type that can resist ordinary stress but who may break under extraordinary mental or physical overloading and for him our preventive psychiatry can aid much in leading him to normal boyhood and manhood by guiding him away from the pitfalls of infancy, childhood, puberty and adolescence. As it is generally quite impossible to distinguish the very strong from the "garden variety", it behooves us to give to all the best of that medical skill that lies within us.

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# JOURNAL OF THE MEDICAL SOCIETY OF N. J.

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## MEDICAL DEFENSE INSURANCE.

It is to be hoped that every member of the State Society will read studiously that portion of the recently published "Transactions" which presents the report of the committee dealing with this subject, and the interesting general discussion which followed. Scarcely any subject under consideration can be of greater importance than this one of safeguarding the medical practitioner against unreasonable attacks from disappointed or disgruntled patients, or from shyster lawyers. That such unreasonable attacks upon physicians and surgeons have greatly increased in number during the past twenty years, is well known. That the vast majority of these suits have been thrown out of court, or have resulted, after trial, in a verdict in favor of the defendant doctor, is equally true. But this latter fact should not lull one into a false sense of security. It is not alone the winning of a verdict against a practicing physician that hurts him; the mere fact that a suit has been introduced does him a certain amount of irreparable harm, and if the charges, no matter how absurd, are not properly defended he stands to be permanently injured in the esteem of his community if not actually mulcted for a considerable money loss.

Recognizing the importance of self defense, the State Society provided years ago for mutual protection to a certain extent, and every member is entitled (in the event of his being sued) to have his case considered by the Judicial Council and, if he is believed to be guiltless, can have his defense conducted by the Attorney for the State Society and his defense expenses covered to the extent of \$250. This measure of assistance and protection does not, however, provide anything in the way of indemnity and, if the case should be decided adversely, the victim must pay the amount assessed against him by the court.

In the effort to secure more satisfactory protection, a special com-

mittee was appointed 3 years ago to study the whole question and to evolve a better plan. The result of that committee's deliberations was the recommendation of a plan for "Group Insurance" whereby every member is assured of the united support of his associates, is certain to receive the very best legal advice and aid obtainable, and, in the event of losing his case, is protected against personal financial loss by the insuring company.

This plan was adopted by the society and subscribed to by a large percentage of the individual members, insurance being taken in varying amounts according to the seeming personal risk, but, it is a disappointing fact that a majority of the members has not as yet taken advantage of this form of self protection. There seems to have been much misunderstanding of the terms and conditions attending the plan and much lack of interest in a problem that may at any moment prove a serious one to any member of the profession.

The explanation made by Dr. Beling at the annual meeting, and more particularly the succinct and complete exposition presented by Dr. Morrison, should serve to clear away any doubts that have previously existed as to the value of the Group Plan of Insurance. The latter emphasized the importance of certain features of the contract offered; to wit, that the physician's defense is in the hands of an especially selected attorney—one selected upon the basis of his being a specialist in this line of legal practice—and that the physician himself has control of the case insofar as any possible settlement is concerned; secondly that, if necessary, every case will be contested up to the highest court in the land; thirdly, if one desires, he may have counsel of his own personal choice to work in coöperation with the Society's attorney.

The cost of this insurance is certainly not very great: The premiums are \$16 for a \$5000 policy; \$21 for a \$10,000 policy; \$27 for one of \$25,000; and it is probable that this relative cost will be reduced as the number of insured increases. Surely such protection as is here offered is worth the cost.

In organized medicine, as in all other walks of life, certainly in all business ventures—and medicine has its business side, however much we may deplore the fact—it is true that "in union there is strength". We make an urgent appeal that every member not already protected by this Group Insurance through the State Society, shall give immediate attention to the problem, shall do himself the favor of reading and carefully pondering on what the State Society officials have recommended as in their judgment is good for him, and, if convinced of the wisdom of carrying protective insurance, shall support the plan advocated and endorsed by the Society.

Do it now. Do it before you get too busy with the winter's work. Do it before you find yourself in need of it. After a suit is filed against you is a bad time to commence your search for protection.



## Esthetics

### PHOTOGRAPHY AS A PASTIME.

At the annual convention of the State Society, the Editor enjoyed the privilege of demonstrating some of the pleasures to be derived from the use of photography as a hobby and, combined with walking, as a means of physical exercise. His own personal predilection happens to be for true color photography but that is purely a matter of taste and has little or nothing to do with the benefits to be gained from playing with the art of picture taking. It happens to be an opportune moment to focus attention upon this subject, because the world is now celebrating the centennial anniversary of the discovery of photography, and consideration of the various possibilities of the art, open to amateurs particularly, should encourage even a larger number to take it up as a "game", to be played partly for the direct benefits to be gained from out-door life, in search of suitable pictures, partly for the treasures thus to be found, partly for the pure joy of creating something beautiful—something to be preserved as a thing of beauty and joy forever.

Apropos of this photographic centenary, the New York Times, July 26, published an interesting editorial: "The official honors paid this month in France to Nicéphore Niepce marked the centenary of his discovery of the principle of photography. As an active influence in human affairs the photograph is considerably less than a hundred years old. Daguerre, the more famous associate of Niepce, produced the daguerreotype in the later '30's, some years after the death of his collaborator. The daguerreotype gave way to negative plate photography only in the '50's. Not until the '60's? did everybody begin to have his photograph taken; and another 20 years passed before the camera came into the hands of the public.

At first people were deeply impressed by the automatically recorded image. At least, it seemed, a person had the means to follow the Socratic admonition, "Know thyself". Light, lens, chemically treated plate could

not lie. As Daguerre's device showed you, so you were. The art of making photography something more than literal was yet in its ingenuous infancy. Those who will examine old daguerreotypes will find among them specimens with a faint pink on the cheeks and a faint gold in the hair that photography, strictly speaking, never put there. But the beginnings of photographic art, of effect, were slight and pallied. Early photographs told the truth without fear or remorse.

Painting felt the effect of the growing respect for the photographic point of view. Men like Meissonier, who could vie with the lens in wealth of clear detail, came into high honor. So did realism. Human beings found it quite as wrong for an artist to flatter a horse or a tree as to exaggerate the charms of a beauty or the bearing of a king. A whole "Old Régime" of illusions, personal, social and esthetic, vanished before the camera.

Photography still exerts its great primary influence, even though the view has gained ground that for all its clearness and accuracy it leaves something out of the picture. It still plays the part of a great democratizing influence, in making all men, quick or slow witted, intuitive or matter-of-fact, see things alike. The printed photographic reproduction and the moving picture have indeed brought before the public eye those objects, faces and scenes that it is important that the public should see in precise detail. What ink does for words, photography does for things visible. Words are testimony, the photographic record is evidence. The present familiarity of the public with matters of general interest and concern could not have been attained in the days before photography. The work of Niepce and Daguerre, first thought of as a mere economy in small portraiture, has become a means of men's seeing all things with a minimum of illusion and of error.

Opinions differ as to whether photography has sublimated art or merely created it. In either case it has taught a more searching scrutiny of the things that meet the eye. It has been an esthetic influence as well as a social and educational power. The camera must stand with the steam engine and electric generator in the list of tangible things that have created differences between today and 1825."

The great development that has taken place in recent years has enabled anyone to

become a "photographer", and with little work or expense, even with but little knowledge of the art, on his part. The "kodak" makes it possible to "snap-shot" any scene and "let George do the rest"; development and printing of films is done so well and so cheaply today by numerous establishments in every town, that the average amateur prefers not to be bothered by doing the work himself. Of course, in following that method he loses much of the possible pleasure—of seeing the picture "come out" and take form, and of printing it so as to secure his personal idea of artistic effect.

The one great disappointing feature of photography has always been its lack of color reproduction. One found a beautiful country scene, colorful, vivid, and after careful focusing, accurate determination of exposure time, labored development and printing, felt terribly disappointed in the result—a picture that was perfect as to detailed outlines, but which did not do justice to his recollection of the view. The sole fault lay in the absence of color, but that spoiled the effect for most observers and discouraged many from further labors in that field.

Then, the artist has always looked somewhat askance at the photographer and has twitted him with the criticism that his work could never become art, could never compare with painting, because the result lacked color and had no perspective. That day has passed and the photographer has reached a new plane, a plane where color and perspective are far more perfect than painting can ever produce and where there is room for unlimited display of art in the selection of material and its artistic reproduction. Another Frenchman had made this possible and, as was explained in our lecture, the Lumière method of true color photography makes it possible for the amateur to make absolutely accurate pictures of what ever scene he pleases. It is a fascinating hobby and a glorious means of physical and mental exercise. A number of artists have not only acknowledged the value of this latest advance in the science of photography but have given it a place in association with their own art—have adopted it in lieu of "sketching", because it enables them to record with absolute accuracy all the detail and color in any scene and to copy from that record whatever they wish instead of having to rely upon memory.

## Medical Economics

### THE HOSPITAL AND THE "OUTSIDE DOCTOR"

There is a lamentable failure of liaison in many places between hospital professional staffs and other members of the medical community. The result is that the hospital staff does not get as much or as good preliminary information about its patients as it should, nor does the practitioner who sends in the case, learn from the work of the staff what he might. Most important of all, the patient does not receive to the full the possible benefits of his residence in hospital, either during his stay or in the time that follows his discharge.

Some of the reasons are not far to seek. The visiting staff of the hospital, like everyone else, are busy. They have their outside work to do, and its pressure too often tends to spending the smallest possible time in the hospital wards, where laboratory work and treatment can be ordered, and where internes are present, ready to carry out detail and do the bulk of the work of investigation under the direction, though not always too close supervision of their attendings. It is only human, when one is pushed and weary, to forget and forego the minor courtesies of life; to take quickly and casually the information at hand; to fail to delve more deeply and painstakingly into problems, which, on the surface, seem to be adequately working to a solution. It is only human, and indeed it is sometimes good practice, not to do the things someone else can do for one; but a too broad application of this principle may leave many things undone.

There is an unfortunate tendency on the part of many staffs to the development of a self-sufficient attitude, a feeling that wisdom is concentrated in one favored spot, and but hazy and scattered in the environs. This is augmented unconsciously by the interne staff, who look naturally enough to their superiors as teachers and exemplars, and who develop subconsciously a partisan feeling toward their attendings, especially in any case where a difference of opinion arises between staff and outside doctors.

Natural enough, to be sure, but it develops at times, an unfair antagonism to the outlander, a desire to differ with him, to regard him as culpable, to disagree on



general principles with any diagnosis he may have ventured to send with his patient.

Carelessness then, and a distorted state of unconscious antagonism on the part of hospital staffs may be one factor. On the other side, the practitioner too is busy, and having sent a more or less worrisome case to the hospital, his tendency often is to shift at once all responsibility to the shoulders of others and let them worry.

He is hard pressed for time, and an extra visit or two to the hospital, which carries with it no sense of responsibility and no financial return, may prove a burden all too easily avoided. So, when the patient comes out, more or less on the road to recovery, the practitioner, in poor position to understand just what has happened and is now taking place, may seek refuge in criticism of what has been done, or in fault-finding because he has not been kept informed. He fails to acknowledge that he took no pains to keep himself informed.

Again when the patient is discharged, the hospital attending, having failed to hear anything from the practitioner during the patient's residence in hospital, may conclude that he takes no interest, and realizing that further and intelligent follow-up work is needed, the patient is easily persuaded to continue under his supervision after hospital residence is finished. What the staff man does not realize is that the practitioner has not been met half way, and that, as the insider, the main duties of the situation belong to the hospital man.

Thus both parties to the issue fail in magnanimity and in courtesy to each other. Each suffers, but most important of all neither has done his full duty to the patient, and primarily for the same reason—too much hurry—days too crowded to take overmuch thought for the other fellow.

Patients enter the hospital for one of three reasons: surgery, nursing care, or diagnosis, the home environment in the particular case being acknowledged to be inadequate.

In the performance of these functions that hospital most largely serves its community which works in harmony with the physicians not on its own staff; which notifies them of and invites them to operations, bedside clinics, and autopsies; which asks their opinion in a spirit of mutual helpfulness; which sends its patient home again to the care of a practitioner intelligently enlightened as to all the hospital has learned.

And that community is best served by its professional members, whose physicians feel that in the special group who make up the hospital staff they have a useful adjunct, and a necessary complement to their work as practitioners.

## In Lighter Vein

**Merely Convalescent.**—"I think her voice is improved a great deal, don't you?"

"Yes, but not cured."—Penn State Froth.

If the Filipinos complain that their "independence" is a mockery, they might cross the Pacific some time and take a look at ours.

—Life.

**The Telephone in Austrilia.**—"That's old Dogsbody just come out of the telephone box—he's turned ninety-two."

"Lord! How old was he when he went in?"

—Sydney Bulletin.

Well, the merchant fleet is typically American. It is living beyond its income.

—Bethlehem Globe.

### The Hangover.

Johnny had been the guest of honor at a party the day before, and his friend Paul was regarding him enviously.

"How was it? Have a good time?" he asked.

"Did I?" was the emphatic answer. "I ain't hungry yet!"—Am. Legion Weekly.

**Timely Warning.**—Electrician (from top of building from which four wires dangled)—"Bill catch hold of two of them wires."

Bill—"Right."

Electrician—"Feel anything?"

Bill—"No."

Electrician—"Well, don't touch the other two, there's 2,000 volts in them."

—Liverpool Echo.

**Not Hers.**—Capt. A. B. Randall of the renovated Republic told a story the other day.

"A steward," he said, "stood at the gangway of a ship of mine, and as he stood there he kept shouting for the benefit of the arriving passengers:

"First-class to the right! Second-class to the left."

"A young woman stepped daintily aboard with a baby in her arms. As she hesitated before the steward he bent over her and said in his chivalrous way:

"First or second?"

"Oh!" said the girl, her face as red as a rose. "Oh, dear, it's—it's not mine."

—The Pittsburgh Sun.

### S. O. S.

Sober Brother.—I've come to bail you out.

Intoxicated Brother (in jail)—You don't—hic—need to bail me—hic—out. I'm not full.

—Lehigh Burr.



## Observations from the Lighthouse

In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.

### THE TONSIL QUESTION.

(Continued from September Journal.)

#### TREATMENT OF DISEASED AND SUSPECTED TONSILS.

Until quite recently, the whole trend of expert surgical opinion as regards the treatment of infected or hypertrophied tonsils has been in the direction of complete tonsillectomy—complete enucleation of the tonsil in its capsule. About 3 years ago the possibility of treating such diseased lymphatic tissue by radium or Roentgen rays began to attract attention and still more recently diathermy has received more or less consideration. There can be no question but that a clean, surgical procedure is preferable to any other in the vast majority of cases, but as there are not a few instances in which some other measure may have to be considered, and as one does not wish to condemn any measure without trial, or at least without due consideration of the arguments in its favor, it is well to give thought to the several different propositions advocated as a substitute.

Perhaps the first to report any experience with Roentgen ray therapy for chronic pharyngitis and tonsillitis, was W. D. Witherbee, who states in a recent article (J. Ophth., Otol. & Laryngol., 28:393, Nov., 1924) that the 3 basic principles involved in x-ray treatment of chronic pharyngitis and tonsillitis are: (1) Destruction and absorption of the lymphocytes in the infected lymphoid tissues by the x-rays. (2) Drainage and eversion of the crypts of all the lymph structures involved. (3) Immunity of the tissues produced by small doses of Roentgen rays, thereby protecting the patient from recurrent attacks of pharyngitis and tonsillitis. Two months after a series of treatments the tonsils and the adjacent lymph structures are reduced to a firm and fibrous mass, whose size depends on the amount of fibrous tissue present before treatment began—its result of the recurrent infection of pharynx and tonsil. Those who claim that Roentgen ray treatment increases fibrous tissue are not aware that the only successful procedure in the prevention of excessive formation of fibrous tissue (keloid) up to the present time is radiation. Of cases of pharyngitis and tonsillitis treated by Roentgen rays, 80% have been free from recurrent attacks for 2-3 years. Cultures made from throats after treatment have been free from pathogenic microorganisms from a few days to several months.

Roentgenotherapy given previous to operation materially lessens the amount of dissection necessary, thereby decreasing the possibility of complications. The treatment is recommended in cases where an anesthetic operation is contraindicated, in arterio-sclerotic patients, where hemorrhage may cause complications, in patients whose tonsils are so imbedded in infected tissue that operation is liable to cause dissemination of septic emboli, in patients with marked infection in nearby lymphatic structures, in those suffering with chronic cardiac or renal disease, or any condition that has lowered the general resistance, and in patients subject to peritonsillar abscess. It is also applicable in cases where patients still suffer with recurrent attacks of pharyngitis after removal of tonsils and adenoids. The author has treated over 2000 cases in his private office.

W. L. Pondell has been treating tonsils by Roentgen rays ever since Witherbee published his method and claims (J. Radiol., 5:137 Sept., 1924) to have applied this treatment to many patients who were subject to quinsy, repeated attacks of acute follicular tonsillitis and submerged and infected tonsils. His technic consists of a 10 in. spark-gap; 10 in. focal distance; 1 mm. aluminum, 0.5 mm. copper and a piece of sole leather as filter; time 4 minutes. His treatments are administered weekly until 15 minutes are given, then once every 2 weeks, the average number being 8-10. He has had no burns and but little tanning. Pondell does not agree with Peden that shrinkage of the tonsils by Roentgen rays seals up the infected material within the tonsils. He believes the Roentgen rays do in fact cause the tonsils to shrink through destruction of the embryonic lymphoblastic root cells, and as the follicles undergo shrinkage the crypts inevitably become shallower until they are completely obliterated. All large tonsils, he says, enlarged lymphoid tissues, whether adenoid or situated behind the pillars or occluding the eustachian tubes and causing deafness, and all chronic sore throats not amenable to ordinary treatments, can be greatly benefited by Roentgen rays judiciously used.

A somewhat different technic in the use of Roentgen rays is advocated by A. L. Yocum, Jr., (J. Radiol., 6:13, Jan., 1925). He varies the Witherbee method by using a 10 in. spark-gap, and the equivalent of 6 mm. aluminum or 0.25 mm. copper and 1 mm. aluminum as a filter. The exposure is repeated 6-8 times, and 12 is the largest number found necessary. A piece of sheet lead with an opening 2 by 2½ in. is used for protection of the head and face. The technic of placing the patient on the table is important. He lies prone; the head should be on a level with the body and turned to one side. With a child the lead rubber should be thrown over the feet. The lobe of the ear is fastened to one side by adhesive plaster; the ray is centered below the ear at the angle of the jaw, and strikes the tonsil. The shoulder should be dropped to get away from the tube, which is then lowered straight down and a heavy enough exposure can be used to reach both tonsils, but Yocum usually exposes both sides. The treatment is generally given with the tonsil applicator of the water-cooled lamp which affords an excellent light for visualizing the throat. After 2 treatments a purulent



aqueous material exudes from some of the tonsillar crypts, which can be easily expressed by making gentle pressure with 2 wooden tongue blades, one behind and one in front of the tonsil. If one or more white or yellow spots are noted sealed to the surface of the tonsil they can be easily punctured with a sharp pointed knife. It has been demonstrated that there is no danger to the lymphatic glands, thyroid, pituitary or any other tissues from Roentgen radiation. After 4-6 weeks the tonsils begin to atrophy, and the highest degree of improvement is reached at the end of 6 months; the tonsillar pillars are smooth and velvety. The lymphoid islands, in the posterior pharynx are also atrophied. Chronic otitis media in children is usually cured. Diphtheria carriers are cleaned up by this method, 80% of whom are free from diphtheria bacilli after one week. There is no pain attached to the treatment. Many children go to sleep on the table.

These have been the principle advocates of the employment of Roentgen rays. C. Augustus Simpson (Am. J. Roentgenol., 12:527, Dec., 1924) has recently put forth a strenuous advocacy of radium as an agent for disposing of diseased tonsils. His paper is based upon 3 years of experience with Roentgen rays and radium and he says that all tonsils that have been treated by Roentgen rays alone show definite masses of lymphatic tissue in the tonsillar fossa, and that the results of such treatment do not compare favorably with those following the application of radium directly on or into the tonsil. Simpson has discarded radium needles and metal covered plaques; the plaque which he has employed since 1921 contains less than 30 mg. radium, spreads over a surface of 2 sq. cm., is oval in shape with rounded edges and no corners, and the window is covered with a rubber composition that filters out less than 2% of beta rays. Its advantage is that more beta rays (which have a bactericidal action) than gamma rays reach the tonsil. The tonsil is swabbed with a 2% cocaine solution and the plaque is attached to a compass-shaped tonil hemostat which retains the open unfiltered window of the plaque directly against the surface of the tonsil, where it remains 30 minutes for each tonsil. A dental suction tube carries off the saliva. This treatment can be employed only for older children and adults. The treatment will diminish the average tonsil as much as 4 or 5 applications of Roentgen irradiation. The largest tonsils have ever required more than 4 treatments at 3 week intervals, and the average case requires 2 treatments.

In adult patients, with sensitive throats, in children and in cases where quick results are desirable, Simpson has been employing glass emanation seeds of varying strength. While 5-1 mc. secures quick and pronounced atrophy, the accompanying reaction and pain make their use impractical, and Simpson now uses emanation seeds of not more than 0.25 mc. in strength. He first paints each tonsil with a 2% cocaine solution and has the patient gag. The average sized tonsil can easily hold seeds. Extreme care should be exercised not to have either seed nearer a pillar nor to have them nearer together than 0.5 cm. It is important to withdraw the curved-tip trocar

slightly before the stylet pushes home the seed. At the end of 8 or 10 days the tonsil becomes pale and a decrease in size is noted. This shrinkage progresses during the next 2 weeks, at the end of which time not a vestige of a previously protruding tonsil may be seen. Close adherence to this technic will produce the most complete atrophy and destruction of tonsillar tissue. Repeating a treatment too soon is harmful. If one application of properly placed emanation seeds will not clear the fossa of all lymphatic tissue, 2 or possibly 3 treatments will, invariably and constantly.

Removal of tonsils by electrocoagulation, diathermy, is discussed fairly by Albert C. Carlton (California & West. Med., 22:554, Nov., 1924) who proclaims that while electrocoagulation may have some salient features to commend it, experience has taught him that it is not a procedure to be employed in every case by anyone though it may become an adjunct to tonsillectomy in certain cases when the proper technic has been acquired. The operation itself can be performed in the course of a few minutes under local anesthesia, but the after-effects are of consequence, and to destroy tonsils completely at one sitting requires skill and experience. Postoperative conditions are comparatively the same as after tonsillectomy and the attendant discomfort must be cared for accordingly. There is also the additional necessity for disposing of the tonsil slough and caring for the inflammation produced by the electric burn which, in some instances at least, affects the surrounding structures. Acquisition of a working knowledge of control of the current is incumbent upon the operator, that he may keep it confined within the tonsil tissue to be destroyed. The current is invisible and, unlike the galvanocautery which is red hot, shows only the result, the coagulated area affected by it. Under influence of local anesthesia it is painless, hemostatic, sterilizing, without shock or physical taxation, and commands itself to timid patients and those who for constitutional reasons should avoid general anesthesia, loss of blood or mental stress.

Small cryptic tonsils, the imbedded type, or the remains of previous operative effort, all of which are difficult to dissect, are ideal for electrocoagulation. Hypertrophied tonsils are not suitable for destruction at one sitting but this can be accomplished by 2 or more operations at intervals of 3-4 weeks. About the fourth or fifth day the sequestrum formed from the coagulated tissue partially liquefies and a fetid odor is noted from the necrotic tissue; this can be modified by antiseptic and deodorizing gargles. Under no circumstances should the slough be forcibly removed, or quantities of coarse food be taken during this period, as either will cause bleeding. When the slough separates it can be gently wiped off.

Before one employs electrocoagulation he should make a careful study of the current and instruments to be used; especially must he bear in mind that the current passes in all directions from the needle, from its point as well as its sides, that the depth of the tonsil tissue must be estimated and at least  $\frac{1}{4}$  in. allowed for in all directions, including the needle tip, to avoid damage to other important structures.



### TONSILLECTOMY.

One can scarcely read the above descriptions of other forms of treatment of diseased tonsils without feeling that elaborate efforts are being made to do something different rather than something better. From the standpoint of the pathologist and the practitioner, there can be no gainsaying of the dictum—if we may paraphrase a bit—if the tonsil offends thee pluck it out, and let such plucking be in the form of complete ablation. To treat a diseased tonsil in such manner as to risk leaving parts of it, to risk leaving portions of the infective material that is causing trouble, to risk invisible injury to important neighboring structures, is certainly not in accord with surgical principles. Surgical removal of the tonsils is clean, safe and thorough, if the operation be properly performed; why, therefore, hunt so industriously for some other method of treatment that must be less satisfactory in its assurance of completeness, which must be explained and excused so profusely and which, at the best, can only be preferred to surgery in a very small percentage of cases? If it is agreed by the majority of observers, and it seems to be, that tonsils should be removed when they are obstructive to respiration or are serving as a local focus of infection which endangers other bodily structures, then there is but one reasonable thing to do—remove such tonsils completely by the simplest and safest surgical procedure.

At this point there arises a multitude of opinions as to what constitutes the best method of procedure, and, here again, there has been much elaborate effort to "modify" or "improve" the basic, fundamental technic of tonsillectomy; efforts which are largely futile in that they add nothing of value to a procedure that requires no special elaboration. The writer has never seen any necessity for departing from the simple, established principles of general surgery in the performance of a tonsillectomy; neither an elaborate equipment nor an elaborate technic is called for. Cleanliness, as near an approach to surgical asepsis as can be had in an infected mouth; thoroughness in removing a diseased organ without injuring neighboring structures; prevention of bleeding as one would in any other operation, by ligating vessels at the moment when they are injured; cleaning and drying the operative field before permitting the patient to be taken from the operating room; careful postoperative observation and care, with rest in bed for at least 2 days; these are essentials. Tonsillectomy is not a **minor** operation, to be performed by anybody who thinks he can wield a scalpel or manipulate a tonsillotome or a snare. Tonsillectomy is a **major** operation quite as important, and requiring quite as much skill for its proper performance, as an appendectomy. The performance of tonsillectomy should be permitted only to those who have been properly trained in general surgery and in the special anatomy and surgery of the throat; in other words, the writer believes that no worse crime is being perpetrated in America today than that of allowing everybody and anybody to attempt performance of this operation. The crime does not consist, as many physicians seem to think,

in the "slaughter of the tonsil", meaning thereby the indiscriminate removal of tonsils, so much as it does in the prevailing tendency for every surgeon and general practitioner, as well as every half-baked specialist, to consider himself competent to remove tonsils. Tonsillectomy is really an operation that calls for good surgical judgment and a considerable degree of technical skill and it should be performed only by those who have received adequate training and have given evidence of ability to deal with this problem as it normally appears and as it may present unusual conditions. If we ever reach the day when proper attention shall be given to preoperative preparation and postoperative care of the tonsil patient, and where only capable persons perform the operations, all of the dangers of the operation and all of the criticism now attending it will disappear.

As to the indications for tonsillectomy, the writer feels rather strongly that there is no such thing as a good, healthy, tonsil, and feels equally strongly that removal of tonsils should be entrusted only to those surgeons who have demonstrated ability to perform this special operation. Just as it was at one time believed in this country that there was only one type of good Indian—a dead Indian—so he believes that there is but one type of harmless tonsil—an ablated tonsil. As to the technic of tonsillectomy, he believes that there has been no material improvement upon the simple surgical procedure so well described by Coakley on various occasions.

### RISKS AND RESULTS OF TONSILLECTOMY

Two very important questions connected with this operation deserve special consideration: (1) What are the risks of the operation, as regards hemorrhage and the age factor? (2) Do the results in the majority of cases justify the operation? In answer to these queries, we submit the views of Cornelius G. Coakley as expressed in 2 papers published in 1922 and based upon his personal experience, which is probably as large as that of any American specialist.

Under the title of "Hemorrhage During and After Tonsillectomy and the Surgical Principles Involved in its Control" (J. Laryngol. & Otol., 37:3, Jan., 1922) he says: Hemorrhage during and after tonsillectomy on adults and to a lesser degree on children is a cause of great anxiety to patients and their parents. Most patients over 35 years of age who have infected tonsils requiring operation admit the necessity and desirability of operation but state that they are "too old" and usually cite one or more instances of severe postoperative hemorrhage occurring among friends which makes them reluctant to submit to the operation. When asked whether they would fear hemorrhage as a complication of any other surgical procedure, such as appendectomy, they invariably answer "no".

Coakley declares that age is not a factor to be reckoned with in tonsillectomy any more than in any other surgical procedure, and he rather ridicules the explanation frequently given after such hemorrhages—that the patient was a bleeder; hemophilia is not a common condition. The first requisite to control of bleeding either at the time of or after operation is accurate knowledge of the local blood supply and his article is accompanied



by a series of excellent drawings and a clear description demonstrating the tonsillar vascular supply, both arterial and venous. All the arterial vessels of the tonsil come from the external carotid. There is a confluence of the veins near the lower pole of the tonsil from which point a large vein leads off to the pharyngeal plexus or empties directly into the jugular, and here the danger is naturally greater and the possibility of jugular thrombosis is much increased. Coakley suggests that this direct communication with the jugular may account for some of the cases of pulmonary abscess, through the dislodgment of a septic thrombus into the circulation and its final deposition in the lung.

For purpose of study, tonsillar hemorrhage is classified as follows: (1) Immediate or operative hemorrhage; (2) recurrent hemorrhage, bleeding occurring within 12 hours; and, (3) secondary hemorrhages, which seldom occur before the fifth day but may appear at any time up to the third week after operation. Various expedients are resorted to by different operators for controlling operative hemorrhage. Some surgeons disregard entirely the bleeding and trust to luck that after a more or less loss of blood the hemorrhage will cease. "This practice is to be severely condemned, for while it is true that in most children and in some adults spontaneous cessation of bleeding does occur, it is only after an unnecessary amount of blood is lost." Pressure within the fossa, with gauze sponges, save as a temporary expedient, is unreliable. Suturing of the pillars and the use of clamps is not good surgery.

The proper surgical treatment of hemorrhages from the tonsil should be the same as that used by surgeons in operating elsewhere in the body, namely, to seize the bleeding points and ligate them. After describing his own method of performing tonsillectomy, Coakley illustrates a method of ligation that is simple and effective and seems worthy of universal adoption. The Allis hemostat, with 4 mouse teeth, is used; the handles of this instrument being made of the special length of 7 in. A straight hemostat is used for picking up vessels on the posterior wall of the fossa, whereas a slightly curved one is more useful for seizing vessels in the supra-tonsillar region or to displace the pillars so as to reach bleeding points at the lower pole. After much experimenting, small black silk braided fish line, which has a tensile strength of 8 to 14 lbs., has been found to make the best ligature. A piece of this silk, 14 in. long, sterilized by boiling, has a slip-knot tied in the middle of it, the loop being large enough to pass over the handle of the hemostat holding the vessel. The knot should be drawn sufficiently tight to let the free part slide with slight friction. The non-slip part of the loop is grasped close up to the knot with the end of a pair of slightly curved, long handled forceps. The loop is placed over the hemostat and carried down the shank and over the end of the hemostat, so as to engage the vessel. During this manipulation the loop is gradually lessened in size by pulling lightly upon the sliding part. The placing of the loop is done entirely with the forceps until such time as the loop is over the end of the hemostat, when the free end is drawn tight and the vessel ligated. The hemostat and clamp are re-

moved and the free ends of the ligature are picked up and cut off close to the knot; although this knot is the famous slip-knot, when pulled tightly it does not slip and the ligature may be found in the fossa from 6 to 12 days later. If several forceps are threaded with such a slip-knot ligature at the beginning of the operation, ligation may be performed as quickly as a surgeon would ordinarily tie a vessel in an open wound.

In conclusion, the laryngologist is urged to the same surgical care of bleeding vessels during and after tonsillectomy that is employed by surgeons operating on other parts of the body.

Reporting upon an "Analysis of the Systemic and Local Conditions Following Tonsillectomy and Adenoidectomy", Coakley and his associate, Edward L. Pratt (*Laryngoscope*, 32:81, Feb., 1922) present the results of a careful investigation of their own work:

Since there is no operation in surgery so frequently performed as tonsillectomy and adenoid excision concerning which so little "follow-up" investigation has been undertaken, this report analyzes the conditions found in the private work of the authors during the period from January 1, 1908, to July 1, 1920. The study concerns 926 patients whose ages varied from 6 months to 68 years. General anesthesia was employed in 794 cases and local in 132. Hemorrhage occurred in only 15 cases; of these patients the youngest was 13 years and the oldest 45. Dividing them into classes it is found that 9 bled within 12 hours after operation, 1 between that period and 5 days' postoperative, and 6 after the fifth day. Of the 130 patients over 40 years of age, only 2 had hemorrhage. There were 2 cases of bleeding from adenoids; a boy of 10 bled a few hours after operation and again 6 days' later, and in the other case, a woman of 24, slight hemorrhage occurred after 6 hours. But 1 case of acute otitis media developed immediately after tonsillectomy. This operation was followed once by lung abscess, the patient being a man of 50 who was operated upon under local anesthesia, and the clinical history indicated that an infective thrombus had dislodged from the tonsillar fossa and had been carried on as an embolus. During the 12 years that have elapsed, 6 of these patients are known to have died but in no instance was the cause of death in any way associated with the operation and in only 1 with the condition for which the operation had been performed.

An elaborate questionnaire, requesting information concerning the reasons for which treatment was originally advised and the condition of health since the operation, was sent to each of the 926 patients. Replies were received from 689, no response from 172, and 60 were returned by the postal authorities. Tables are given to show all the details of this inquiry. As to the causes for which treatment was required, and the results: of 69 who complained of frequent sore throats, 60 reported the operative results entirely satisfactory and reexamination of the other 9 showed remaining tonsillar tissue in only 1—the other 8 having some chronic nasal or pharyngeal trouble to account for their symptoms; of the 36 having complained of diseased tonsils and 35 of hypertrophied tonsils, all reported satisfactory results; of 18 quinsy cases, only 1 reported an

attack after removal of the tonsils; enlarged cervical glands were the cause of operation in 27 cases and of these 19 were entirely successful, 4 reported the glands reduced in size, 4 were not benefited, and 3 of these latter were shown by removal and pathologic examination to have been tuberculous; of the 35 patients who sought relief from mouth breathing, 31 were entirely relieved, 2 were partially successful and 2 were not helped.

There were 42 cases where ear trouble was given as the primary cause for removal of tonsils or adenoids. Of the 15 complaining of impaired hearing or deafness, 9 reported their hearing as restored to normal; all of the remaining 6 had suffered for a long time from badly impaired hearing. Of 5 cases of frequent earaches, all were cured; 1 case of tinnitus was relieved and 1 was not; a slow-healing mastoid wound promptly healed after operation.

Under the heading "systemic conditions", 55 different conditions are listed as having been the reasons for operating. Of 5 patients with definite heart lesions, 3 were cured and 2 benefited. Similarly, 5 cases of nephritis with albuminuria were all cured. Rheumatism being a term used rather loosely by the laity, all of the 107 cases so listed are not considered by the authors as reliable, but, of the 46 rheumatic cases that could be verified, only 8 failed of improvement by tonsillectomy.

Considering the question of secondary operations upon the tonsils and adenoids, it is observed that 145 of their patients had been subjected to operation prior to coming under their care and of these, 115 had been operated on once, 23 had had 2 previous operations, 2 had been operated upon 3 times, one 4 times, and 4 had been subjected to operation several times. "It would seem that this is an amazingly high record of failure for any common surgical operation, and indicates either a faulty technic or a lack of skill so great as to place an unjust burden on the patient and a stigma on the profession. Of our own cases, we had to reoperate on the tonsils in 1 case, 5 years after the first operation, and 3 patients we had operated on reported that another surgeon had to operate a second time. Of the adenoid cases we had to reoperate on 5 cases which we had previously operated on and 2 of our own patients reported that other surgeons removed their adenoids a second time."

The following conclusions are presented: (1) Where the pathologic condition of the tonsil warrants its removal, age is as negligible a factor as it would be in any other common surgical operation. (2) Hemorrhage, either during or after operation, can and should be controlled according to the same surgical principles as govern its control elsewhere in the body. (3) A well-done tonsillectomy and adenoidotomy causes a marked lessening of the acute infections of the upper respiratory tract and lessens the tendency to attacks of acute middle ear disease. (4) The percentage of successful and partially successful results in cases of rheumatism justifies the removal of tonsils in cases where the tonsils are proved to be diseased and where the elimination of other sources of infection has failed to give relief. (5) In properly selected cases of cardiac and renal disease tonsillectomy is justified by the successful results reported.

## County Society Reports.

### ATLANTIC CITY HOSPITAL STAFF.

Joseph H. Marcus, Reporter.

The monthly meeting of the Atlantic City Hospital Staff was held on the evening of August 21 at the hospital. The meeting was called to order by Dr. Richard Bew, Vice-President.

The minutes of the previous meeting were read and approved.

After the dispensation of the routine business and the various committee reports the Scientific Program was presented, which feature embodied a report of the medical service by Dr. Samuel Barbash and Dr. Philip Marvel, Jr.

Among the variegated and instructive case reports presented were the following: Adult, male, colored, was admitted, the chief complaint being "inability to swallow". This trouble had commenced a year ago, during which time it had increased. It included both liquids and solids; there was frequent vomiting after eating. Upon physical examination the patient presented a picture of great emaciation; otherwise negative findings. Due to the patient's exaggerated asthenia a bismuth study was not advised.

Dr. Homer I. Silvers was consulted as to surgical interference, but felt that such a procedure was not justified as no benefit would be derived therefrom. Patient died on the afternoon of the day of admission. Necropsy revealed a diverticulum of the stomach wall directly under the esophagus on the posterior wall. Death was due to starvation. The picture presented by this patient was similar to that of carcinoma of the esophagus.

The second case presented was one of Lymphatic Leukemia in an adult male, 53 years of age, the outstanding feature being pain in both groins. Family and personal histories were negative. Patient was admitted April 10, 1925. He stated that he was losing weight in addition to having night sweats and coughs. Some few weeks prior to admission, the patient passed clay colored stools accompanied by nausea, but no vomiting, and was informed that he had "liver trouble". At examination the heart was found to be enlarged and accompanied by a loud systolic murmur over the precordium. The abdomen was tender and the liver extended  $1\frac{1}{2}$  inches below the costal margin. Slight edema of both feet and also splenic and glandular enlargement were present. Systolic blood pressure was 115, the diastolic 56. The temperature during the next few days was irregular and without consistency rising to 101. On April 14, blood analysis revealed the following: Erythrocytes, 801,000; leukocytes, 4100; hemoglobin, 15%; small lymphocytes, 56%; large lymphocytes, 36%; polynuclears, 5% eosinophiles, 1%; one myelocyte and one nucleated red blood cell. April 17, platelets numbered 90,000 per c.m. April 20, red blood cells, 800,000; leukocytes, 1440; small lymphocytes, 45%; large lymphocytes, 36%; polynuclear, 15%; and four nucleated red blood cells. Patient was transfused, using 500 c.c. of typed blood from a donor. Following this transfusion, erythrocytes numbered 1,500,000 and leukocytes 800.



Several hours later the patient became weak and commenced to bleed from the mouth and the nose. Patient died, the bleeding being unaffected by the injection of various coagulants.

The third case reported in detail, displayed very thorough and exhaustive procedures in diagnosis, therapy and necropsy. The patient was a female, 35 years of age and married, the chief complaint being dizziness, headache, dyspnea and constipation. The past history included measles and pertussis, tonsillitis, grippe and urticaria. At the age of 6 she was thrown from a wagon and injured her back. One year ago she suddenly became dizzy and her hearing was affected. She coughed blood and in one year lost 12 pounds accompanied by night sweats. Patient had one child and had sustained no miscarriages or stillbirths. The outstanding findings upon physical examination disclosed enlargement of the heart both to the right and the left; precordial thrill; loud systolic murmur and enlargement of the liver. Blood pressure was 235 systolic and 140 diastolic. Blood examination showed 3,200,000 erythrocytes, 23,000 leukocytes, hemoglobin 60%, polynuclear 89%, no increase in temperature. Urine examination revealed a large amount of albumin, many erythrocytes and few leukocytes, 1 hyaline cast. The urea nitrogen was 20 m.g. per 100 c.c., creatinin 1.7 m.g. per 100 c.c. The Wassermann was negative; phenolphthalein output was 10% in 2 hours with the fixation of specific gravity at a low level; the night to day ratio being 3 to 1. One month prior to admission the patient lost sight of the right eye. Among therapeutic procedures was the removal of 600 c.c. of blood by phlebotomy and instillation of 500 c.c. soda bicarbonate solution by hypodermoclysis. Prior to phlebotomy the systolic pressure was 248 after which it fell to 195. During the patient's hospitalization, constant urine and blood studies were made. The following were the more important findings revealed by necropsy: Chronic nephritis typified by small red kidney; chronic valvular disease associated with arteriosclerosis, Cirrhosis and passive congestion of the liver and spleen; congestion of both bases of the lungs, marked enlargement of the heart and marked hypertrophy of the left ventricular wall.

In the discussion of the foregoing cases Dr. Clarence L. Andrews detailed certain diagnostic features relative to diverticulum of the stomach stressing certain differential points in the diagnosis of lymphatic leukemia; incident to the nephritis in the case presented, Dr. Andrews emphasized the variation in the phenolphthalein test that one must be extremely careful in the technic as to consistency of reports; that the blood chemistry plays an important factor in diagnosis. Dr. Philip Marvel, Jr., stated that in these kidney conditions it is most important to support the circulatory system as has been demonstrated by various authorities that these patients succumb not infrequently to cardiac failure.

Dr. S. Barbash spoke of the value of mercurochrome which he used in the treatment of pneumonia, arthritis and endocarditis. He will present a detailed report at a later meeting.

Dr. D. W. Scanlan stressed the differential diagnosis between the acute surgical abdomen and certain cases of nephritis. He felt that

blood chemistry would cheer up the diagnosis. Dr. Richard Bew, in speaking of cases of nephritis, gave a bad prognosis when Pulsus Alternans is present; in such cases, according to McKenzie, two years is the average length of life.

Dr. Bew further stated that a sustained high diastolic pressure is of grave significance. Dr. Bew presented a differential diagnosis between acute lymphatic leukemia, acute splenic anemia; lympho-sarcoma and tuberculosis with anemia.

A very important feature mentioned was the removal and pathological examination of a gland. Doctors Samuel Barbash and Philip Marvel, Jr., closed the discussion.

Upon proper motion the meeting was adjourned.

### BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meetings of the Bergen County Medical Society were resumed on Tuesday, September 8, at the Hackensack Hospital, the president presiding.

Upon recommendation of the Membership Committee, Dr. H. B. Wolowitz of Hackensack and Dr. Jukofsky of Ridgewood Park were elected members of the society.

The scientific program consisted of a paper on Management of Stone in Ureter and Kidney, read by Dr. Louis R. Kaufman, Urologist to the Fifth Avenue and Community Hospitals, New York City. Dr. Kaufman said, in part, that stone in the kidney or ureter is a disease of active adult life. The longest period of symptoms in any one case was 20 years. The average duration of symptoms previous to diagnosis was found to be 3 years. In Dr. Kaufman's series of 34 cases, diagnosis of stone was made by x-ray in 100% of the cases. There were no cystin stones which were not demonstrable by x-ray in this series.

In discussing clinical symptoms, emphasis was laid upon the absence of text-book symptoms; for instance, pain was abdominal in one-third of the cases, and lumbar in only two-thirds; in one-third, the character of the pain was dull; there were few cases of typical renal colic; the pain was widely referred and not typical; gross hematuria was present in but one-fourth of the cases and entirely absent in some; retention was frequent; and urinary findings were not generally helpful in diagnosis.

The treatment in cases of ureteral stone generally consisted in dilatations of the ureter with a dilating catheter and sterile alcohol. In four cases calculi were removed with the cystoscope and forceps. This proceeding was never attempted with a stone more than 4 cm. above the bladder insertion.

The treatment of all cases of renal calculi was operative. Nephrectomy was necessary in 7 out of the 34 cases. Dr. Kaufman urges routine x-ray examination after operation for fragments of stone which may cause recurrence. The average period in the hospital for these cases was 17 days. Results show 79% of cases improved. In the series of 34 cases there was 1 death giving a mortality of 3%.

Dr. Kaufman completed his discussion with lantern slides, showing particularly x-ray pictures and stones recovered at operation.



**GLOUCESTER COUNTY.**

Henry B. Diverty, M.D., Reporter.

On Thursday evening, September 17, the Gloucester County Medical Society held their Annual Social Meeting at the Woodbury Country Club. The following members were present: Drs. R. K. Hollinshed and wife, J. H. Underwood and wife, H. B. Diverty and wife, Duncan Campbell and wife, S. F. Ashcraft and wife, William H. Carpenter and wife, David Brewer and wife, B. F. Buzby and wife, Elwood Downs and wife, I. W. Knight and wife, C. I. Ulmer and wife, H. L. Sinexon, H. Wilson Stout and wife, James Hunter and wife, W. J. Burkett, C. F. Fisler and wife.

Delegates, as guests of the Society, were present as follows: Atlantic County, Dr. Hallowell; Burlington County, Drs. Newcomb and Darlington; Camden County, Dr. Shafer of Cooper Hospital and Drs. W. W. Kain, Richardson and Kline; Salem County, Drs. Summerrill and wife, James and wife and Davies and wife.

Other guests of the Society were Dr. Amos Underwood of Woodbury, Mr. and Mrs. Butler and Miss Gertrude Spiegel of the Underwood Hospital, Mr. and Mrs. Augustus Pierson, Mrs. Albert Zintl, Mr. and Mrs. Clarence Moore of Woodbury Heights, Mr. and Mrs. Moore of Swedesboro and Dr. Henry Nelson of the Underwood Hospital.

A very attractive dinner was served to the members and guests, and the rooms were specially decorated for the occasion.

Most interesting addresses were made by Dr. Morrison, Secretary of the New Jersey State Medical Society; Rev. Dr. John Handley, District Superintendent of the New Jersey Methodist Episcopal Conference, Camden District; and Professor Hobart A. Hare of Jefferson Medical College, Philadelphia.

Dr. Sinexon of Paulsboro and Mrs. Zintl of Woodbury, rendered several vocal selections which were greatly appreciated.

Mrs. Oram R. Kline gave a reading that was greatly enjoyed.

The members of the Society, who found it impossible to attend, missed a most enjoyable occasion.

J. Hampton Moore, former Mayor of Philadelphia, and once Chairman of the Executive Committee of the Delaware River Joint Bridge Commission, also addressed the Society and again took a very decided and firm stand for the tolls.

Mr. Moore referred to the bridge construction laws, calling attention to the fact that New Jersey's law, providing for tolls, was passed April 8, 1918, and that the Pennsylvania law, which accepted the New Jersey law, although tolls were not mentioned in it, was passed July 9, 1918, a full 3 months later.

Therefore, the Pennsylvania Legislature, before acting, had 3 months' notice of the New Jersey law and substantially accepted its terms. But more than that, the Joint Commission, created by these laws, proceeded to the work of construction with a full knowledge of the New Jersey law and the general intent to make the bridge pay for itself before it was opened toll-free.

The Joint Commission worked together for three and a half years, put the money into one

pot and work went on, yet the toll question was only raised once in the Philadelphia Council.

If free travel is allowed over the bridge why shouldn't the ferry boats be purchased and travel made free for those who are inconvenienced by paying four cents to cross the river? What would people say today if such an act were presented to the legislature at Trenton or Harrisburg? There is little difference between the free bridge and free ferry.

Mr. Moore ridiculed the argument set up by Philadelphia politicians that the construction of the bridge and its maintenance free of tolls would mean no increase in the tax rate. The taxpayers have already paid for the bridge, he said, and they will be compelled to pay for the maintenance of the bridge forever if some revenue is not derived from it.

To say that bonds were sold to raise money for the bridge and that that did not mean increased taxes, was begging the question. Interest must be paid on the bonds and there is mighty little difference between paying interest and taxes. The man who owns a farm and is unfortunate enough to have a mortgage upon it, does not see much difference between taxes and interest, nor does the man who pays rent for a farm, though he may not pay taxes direct.

One cannot tell just what is going to happen in New Jersey, but the speaker predicted that in Philadelphia, though the tax rate may not be increased, assessments will be, and that very soon many of our citizens, despite an unchanged tax rate, are going to pay more taxes than ever.

All the people of Philadelphia, and certainly all the people of Pennsylvania, are not in favor of the politicians' plan to make no recovery from those who use the bridge, of the \$20,000,000 that will have been spent by the taxpayers of Philadelphia and Pennsylvania before this great bridge is opened; nor can they afford to be put in the position of sanctioning the political afterthought which induced the last legislature to pass the Gaffney bill for no tolls, in violation of our common understanding with the State of New Jersey running along from 1919, when the states came together and construction was authorized.

The validity of contracts should hold between states as it should hold between individuals, notwithstanding the tendency of the modern opportunist to break any agreement at will, especially if it is made for the people.

In closing Mr. Moore added in regard to the high taxes that unless a close watch is kept on the legislature, as well as the congressmen, we will never be free from the burden of high taxes.

**PASSAIC COUNTY.**

Louis G. Shapiro, Secretary.

The September meeting of the Passaic County Medical Society was held on Thursday evening, September 10, at the Health Centre Building, Paterson. Thirty-four members were present. Dr. Charles R. Mitchell presided in the absence of the president.

A case of Raynaud's disease was presented by Dr. Mitchell. Marked improvement had

allowed exposure to the sun, while the patient was at the seashore.

A paper on "Otitis Media" was read by Dr. Ireland. Considerable discussion followed.

In the absence of Dr. Stewart, no formal resolutions were presented relating to the death of Dr. Johnson, but words of appreciation were spoken by Dr. Atkinson and Dr. Willard.

Dr. Frederick Lee explained the milk ordinance recently adopted by the Board of Health.

## Deaths.

MURRAY — Dr. William Haughton, of Plainfield, N. J., on September 1st, 1925.

Dr. Murray's end came after what all medical men pray for, a short illness, he having been in, apparently, perfect health preceding his final illness and the writer, who knew him well from his college days, cannot recall that he had ever suffered from any serious ailment.

To his home city, to his innumerable friends in private and public life, to his old patients, over whom he had watched for so many years, to his professional associates, and above all to his own family, there came the painful sense of grief and loss in his demise.

Dr. Murray was born in South Danvers, Massachusetts, on May 13, 1858, being a descendant of the old New England family of John Alden. His father was a clergyman who soon removed to Cambridge, Mass., and later to New York City, where for ten years he was pastor of the old Brick Church. Here Dr. Murray received his preliminary education and then accompanied his family to Princeton where his father became professor of English literature and later the dean of the university, holding that office until his death in 1899.

The doctor graduated from the John C. Green School of Science of Princeton University in 1878 and at once entered the College of Physicians and Surgeons of New York City, obtaining his medical degree in 1881. Then followed a course of study in Europe, and a brief residence in New York, after which in 1885, he made his home in Plainfield where he practiced medicine until the end of his life. He married in 1887 Miss Maria L. Tweedy of Plainfield, who with his son, survives him.

The record of his associations clearly shows how intimately he was connected with the civic life of Plainfield. He was for many years on the staff of Muhlenburg Hospital and a member of the Plainfield Board of Health, also of the State Board of Health, the Plainfield Medical Society, the Hillside Tennis Club, the Rotary Club of Plainfield and the Princeton Club of New York.

He was active in the Charity Organization Society and the Anti-Tuberculosis League, being also president of the Visiting Nurse Association and was to the end of his life president of the Board of Trustees of Bonnie Burn Sanatorium. He was, of course, a member of the Union County and State Medical Societies, and also of the Society for the Relief of Widows and Orphans of Medical Men of New Jersey.

He led the life of an active, energetic citi-

zen, yet like his father before him, was a kindly, lovable, gentle man, always with a quiet, reserved and unobtrusive manner, but accomplishing a great deal of useful work.

His latest photograph depicts him, with his little grand-daughter on his knee, while he showed her the beauties of a picture book and the pose was characteristic of the man.

He was a great nature lover and in his younger days was fond of long walking trips through the White Mountains, of which the famous peak of Chocorua was his favorite.

A good and useful man, leaving to all of us who knew and loved him very pleasant memories.

STICKNEY, Dr. Otis D., of Atlantic City, died on September 27, 1925, as the result of injuries sustained in an automobile accident. The doctor, on September 15, was returning with two friends from Philadelphia, and the driver, to avoid an on-coming car, swerved too far from the track, crashed into a tree and Dr. Stickney was thrown against the tree, sustaining a fracture of the skull and probably other internal injuries. He was taken at once to a hospital and the fracture operated upon, but he never fully regained consciousness and finally passed away.

Dr. Stickney was born in Camden, N. J., on November 13, 1878. His preliminary education was obtained in the Public Schools of Atlantic City and the William Penn Charter School of Philadelphia, and in 1902 he graduated from the Hahnemann Medical College of Philadelphia. He then studied as a post graduate in the ear, nose and throat department of the Hahnemann School, and in 1904 entered practice, confining his work to this specialty. He later studied at the Manhattan Eye and Ear Hospital in New York, and afterwards at the University of Vienna, Austria. He was on the staff of the Atlantic City Hospital and the Atlantic County Hospital for Tubercular Diseases; was a member of his county Medical Society, the New Jersey State Homeopathic Medical Society, the American Institute of Homeopathy, the Philadelphia Laryngological Society, the American Academy of Ophthalmology, Otology and Laryngology, the American College of Surgeons and held membership in many fraternal organizations, including the Alpha Sigma Medical Fraternity, the Rotary Club, the Northfield Country Club and the Morris Guards.

The doctor's ancestors were of English origin, and he traced his ancestry back to a William Stickney, who was born at Frampton, Lincolnshire, about 1592 and came to Boston, Mass., in 1664.

The doctor was never of robust physique and the condition of his health often interrupted his studies and prevented him from serving in the Great War. This also undoubtedly was one of the factors which induced him to cultivate outdoor sports and hunting in the Canadian Woods and the maintaining of a kennel of dogs in North Carolina.

He is survived by his wife, who was Miss Grace Wadleigh, to whom he was married in 1903.

Some evidence of the esteem in which he was held is shown by the fact that the entire staff of the Atlantic City Hospital acted as honorary pall bearers at his funeral.



SWAIN, Dr. Humphrey, of Goshen, New Jersey, died of apoplexy on September 11, 1925; age, 82 years.

He was educated at Eastman's Business College and Fort Edward Institute; entered the medical department of the University of Pennsylvania in 1862 and in his senior year enlisted in the U. S. Navy, being at once appointed a surgeon; serving from May 23, 1864 to June 25, 1865. Dr. Swain saw considerable service especially at the siege of Charleston.

He re-entered the University of Pennsylvania in 1865, graduating March 14, 1866. He practiced medicine for 2 years at Ashland, Pennsylvania, but was compelled, by ill health, to give up active work.

He practiced dentistry for a time in Goshen, New Jersey, and was for many years a Director of Mechanics National Bank and a member of the Cape May County Medical Society.

On December 25, 1873, married Mary Elizabeth Hort, who survives him. He was of a pleasant genial disposition and well liked by his associates.

## In Memoriam.

The Union County Medical Society learns with deep regret, the death of Dr. John P. Reilly, long a member of this society and one of the distinguished practitioners of our city.

He was enthusiastic in the practice of his profession using both of his time and means to improve himself in its special branches, all to the benefit of the suffering ones of the community. Of his knowledge and skill he gave freely to the poor and needy.

His civic pride was shown in the splendid service he rendered the city in the long years of service in the Board of Education, and later in the Public Library Board of which he was still a member at the time of his death.

The Medical Profession has lost one of its ablest members; Elizabeth one of its foremost citizens, and the community at large one of its kind friends and advisers.

We inscribe a page to his memory and extend to his family our sincere sympathy in their bereavement.

(Signed)

Stephen T. Quinn,

George W. Hoore,

Walter F. Phelan,

Committee.

## Marriages.

BRODKIN-TOPKINS.—At Califon on September 8, 1925, Dr. Eva Topkins, daughter of Dr. and Mrs. Isidore Topkins of Califon, to Dr. Henry Andrew Brodskins of Newark.

ROGERS-CHAPPEN.—On October 1, 1925, at Pennington, Miss Emily R. Chappen, daughter of Mr. and Mrs. Samuel S. Chapen, of Pennington, to Dr. George Gaillard Rogers, of 1 Wallace Place, Newark.

VAN ESS-FOSTER.—In September, at Bethlehem, Pa., Miss Louise Chapman Foster, daughter of Mr. Henry Worthington Foster of Bethlehem, to Dr. John Van Ess of the Hotel Reveria, Newark.

## Engagement.

Dr. and Mrs. Richard D. Freeman, of South Orange have announced the engagement of their daughter, Miss Eileen N. Freeman to Spencer Edward Sisco, Jr., of Baltimore.

## Personals.

Dr. and Mrs. Charles L. O'Neill and son, Lee O'Neill, of 11 N. 7th Street, Newark, returned home on September 7, after an enjoyable 2 months' trip in California and the Pacific northwest. Several days were spent at Lake Louise and Banff, on their return trip through the Canadian Rockies.

Dr. William Martin, of Atlantic City, motored to attend the meeting of the American Electrother Association in Chicago. Mrs. Martin and daughter, Edythe, will spend 10 days in the Poconos and the Manor, while Dr. Martin is attending meeting in Chicago.

Dr. and Mrs. Arthur Stern have just returned to their home in Elizabeth, after 3 weeks' stay at the Seaside Hotel in Atlantic City.

Dr. George P. Meyer has removed his office from 407 Cooper Street, Camden, to 410 Hadron Avenue.

Dr. Fred H. Albee of Colonia, who is chairman of the New Jersey State Rehabilitation Committee and instructor in surgery at the Post Graduate Hospital in New York, sailed on the steamship Olympic, to attend the International Medical Congress of Industrial Accidents and Diseases at Amsterdam. Dr. Albee is president of the American section of the congress, which was held from Sept. 7 to Sept. 12. Dr. Albee, who was a colonel in the World War and had command of Base Hospital No. 3 in Colonia, addressed the congress on the "Curative Workshop in Rehabilitation," based on the curative clinics in Newark and Jersey City, and on "Bone Graft in Industrial Surgery." Mrs. Albee and the Albees' son accompanied the doctor. They expect to remain in Europe for a brief time after the congress adjourns.

Dr. Sarah M. Edwards, of 207 Summer Avenue, Newark, and her niece, Miss Sarah Bullen, have returned from an automobile trip to Blue Ridge, N. C. They stopped in Washington for a few days on the return.

Dr. and Mrs. S. Harbourn Baldwin, of 626 Clinton Avenue, Newark, have returned to their home after an absence of several weeks.

Dr. and Mrs. Richard H. Dieffenbach, of 570 Mt. Prospect Avenue, Newark, and their daughter, Anna Lee Dieffenbach, have returned from a motor trip to Lake Placid. They were away about a month. Dr. Dieffenbach's mother, Mrs. Richard H. Dieffenbach, is expected to return from Europe shortly on the George Washington after being abroad all summer.



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## SURGICAL SURPRISES.

W. P. GLENDON, M.D., F.A.C.S.,

Senior Surgeon, Bridgeton Hospital; Consulting Surgeon, Salem County  
Memorial Hospital, Bridgeton, N. J.

(Read at the Annual Meeting of Medical Society of New Jersey,  
Atlantic City, June 18, 1925.)

It is indeed a great honor to read a paper before this gathering, representative as it is of the highest type of the medical profession, and I wish at the outset to express my high appreciation of the privilege. From time immemorial it has been the custom for the essayist to relate his successful accomplishments in his chosen line of work, and to make little mention of mistakes, failures and disappointments, all too frequently experienced in his labors for humanity. Yet we acquire wisdom from our failures as well as from our victories, and the lessons learned from our mistakes are least likely to be forgotten.

Some time ago while discussing some unusual surgical experiences with a professional friend, I asked him to suggest a subject for a paper to be read before this body; his reply was, "Why not Surgical Surprises"? Acting on his suggestion, I have selected this as the title of my article, and in making this selection I am mindful that "surprises" looks and sounds better than "mistakes". Right here it is well to face the fact that with all the accrued benefits of modern methods of investigation, and some of them are invaluable, there are still limitations to our powers of correct diagnosis. Medicine is, after all, not an exact science; therefore our deductions are often likely both to prove incorrect and to lead us to wrong conclusions.

A large proportion of the cases coming to the general surgeon for treatment are due to some lesion of the abdominal viscera, the greatest subdivision of this group being supplied by the appendix. Now, after all we have heard and learned about appendicitis during the last

decade, it seems that its recognition should be easy. Such, however, is not always the case. Pain, tenderness and rigidity of the right rectus muscle do not always mean appendicitis; nor does the absence of this classic triad of symptoms exclude such a lesion. Generally speaking, however, I think it a safe gamble, even at odds, to play the appendix against the field in any case of lower abdominal pain when other signs are obscure. These observations apply to the disease in the adult; in children the diagnosis seems easier, for the disease runs truer to form.

Notwithstanding our best efforts, we often get genuine surprises from our findings on the operating table. For example: A young, unmarried woman was admitted to the hospital with the common symptoms of pain, muscular rigidity and slight fever. A history of previous attacks of short duration and recurring at irregular intervals led the medical attendant to make a diagnosis of appendicitis, and to refer the case to the surgeon for immediate operation. When the organ was removed it did not show sufficient pathologic change to account for the symptoms, even though evidence of former attacks was present. The pelvic organs were then explored and I felt what, at first, seemed to be a pregnant uterus. On being brought into the field, this proved to be a cyst of the ovary, with a long pedicle, overlying the uterus. The pedicle was twisted on its axis and the cyst was filled with dark, bloody fluid, evidently the result of gangrenous changes in its wall. Because of the patient's refusal to allow a vaginal examination, the existence of this tumor had not been suspected. This experience is a strong incentive for the surgeon to make a routine examination of the pelvic organs in every operation for appendicitis in women. As you all know, the temptation is strong in many of these cases to do a short, quick operation, through a small incision, and had I followed that custom in this case I would surely have come to grief.

Perforating gastric ulcer is supposed to be attended by symptoms prominent enough to admit of an unerring diagnosis, yet in this condition, too, the history of the following case shows that things are not always what they seem. A woman was taken suddenly ill with pain and vomiting, and as the local signs of tenderness and muscular rigidity were present, I thought she had appendicitis with a possible rupture. When the appendix was removed, I failed to see sufficient signs of disease to account for the symptoms. Exploration, extended to the upper abdomen, revealed a perforated ulcer of the stomach with liberal escape of gastric contents. It is interesting to note that this patient had received osteopathic treatment 2 days previously, and that the pain occurred soon after these manipulations. Possibly a more detailed pre-operative study of this case might have led the operator to different conclusions, but many of these emergencies are too grave to allow time for extended investigation and require operation at the earliest moment. After all, the scalpel is one of the most important diagnostic aids the

surgeon has at his command, and direct examination of the diseased organ, either by sight or touch, is the most effective way to clear up any doubt.

Let me report here another case, where typhoid fever, mistaken for appendicitis, contributed a genuine surprise for the surgeon. A boy was sent into the hospital with symptoms of acute peritonitis, which I thought was caused by a ruptured appendix. I could obtain no clear history of the illness and thought it wise to operate at once. A perforating typhoid ulcer of the ileum, with general peritonitis, was found, and although the perforation was closed the case terminated fatally. This was one of those rare cases of so-called "walking typhoid" that went on to perforation without manifesting any of the usual symptoms of the disease. Indeed, the early symptoms of typhoid fever frequently bear a striking resemblance to appendicitis and not infrequently lead the unwary into a wrong diagnosis. If the symptoms are not urgent, the delay of a few days may serve to clarify the situation and save both patient and surgeon an unpleasant ordeal. On one occasion, I was called in consultation to see a young girl with the usual signs of acute abdominal inflammation, located in the right lower quadrant; pain, tenderness, fever and slight rigidity of the rectus muscle were present. While palpating the abdomen, I found, near McBurney's point, a localized swelling which I thought was due to some appendiceal condition. Subsequent operation revealed the disconcerting fact that the swelling was caused by enlargement of the mesenteric glands, of typhoid origin. The patient went through the usual typical course of typhoid fever and was apparently none the worse for her operative experience.

It is well to remember that another condition, acute pleurisy in children, is sometimes quite confusing. Here, pain is often referred to the lower part of the abdomen, and, unless examination of the chest reveals some of the characteristic physical signs, the surgeon may perform a useless operation. I made this error once and have faced the same situation once since, when nothing but the lesson learned in the first instance saved me from repeating the mistake.

As might be expected, the field of gynecology is fraught with large possibilities for surprises in diagnosis. The suspicion of pregnancy often arises, during the study of a case, and the signs and symptoms are often variable and erratic. A young, married woman was admitted to the hospital with a diagnosis of incomplete septic abortion. One week previously, she had been taken with pain and bleeding, followed by the discharge of clots and material that looked like decidua. She gave a history of missing 2 periods, and these symptoms seemed sufficient to make a diagnosis of pregnancy probable. The uterus was palpable through the abdominal walls and seemed about the size of a 6 months' pregnant womb. Prior to admission, she had a chill and when I first examined her the pulse was rapid, temperature was 104°



and her condition was critical. Obviously, the first thing to do was to clean out the uterus, which was done after waiting a few days, with no improvement in her condition. A hysterectomy was decided upon as a last resort. Examination of the uterus after removal, showed a suppurating, gangrenous myoma. This tumor had been growing for months without the patient's knowledge. It required some little courage to do a hysterectomy on a patient with a temperature of  $104^{\circ}$ , but, as she made a good recovery, the result proved the wisdom of the treatment.

That big, ductless gland, the spleen, the functions of which are so little known, sometimes slips its moorings and wanders far afield, but it seems almost unbelievable that it is capable of getting into such strange relationship with the uterus as to simulate a fibroid. Consider, however, the history of the following case: A middle aged woman was sent to the hospital with septic symptoms that seemed to originate from some pelvic condition. Five days previously she had been taken with pain and vomiting of sudden onset. When I examined her she was tender over the abdomen and I could feel a hard mass extending from the pelvis into the upper abdomen. I could also feel the tumor, when I made a vaginal examination and it seemed to be attached to the uterus. I made a diagnosis of uterine fibroid undergoing degeneration and, as the patient's condition was serious, decided to operate at once. The operation revealed a very unusual lesion. The spleen had slipped down into the pelvis and rested on the uterus, to which it was adherent. It was gangrenous and its veins were filled with thrombi. Although the spleen was removed the patient failed to rally and died about 12 hours later. The patient had been sick 5 days before she called a physician, a fatal delay, for if she had been operated on sooner she might have had a chance for recovery. If the possibility of such a rare condition had been thought of, it would hardly have been given serious consideration; fibroids have a tendency to undergo degeneration, with serious systemic disturbances, and in view of this fact, the first diagnosis seemed fully justified.

I recently operated on a case that shows how easy it is to make a wrong diagnosis in gynecologic conditions. A woman came under observation with a history of illness of several months' duration. She had some bleeding, at intervals, and a profuse, bloody vaginal discharge between her periods. When I examined her, I thought I was able to make out a large tumor of the uterus completely filling the pelvis and extending up to the umbilicus. In the left vaginal fornix I was able to recognize a swollen tube, and decided that the condition was a uterine fibroid with pyosalpinx. You may imagine my feelings, during the subsequent operation, when separating the peritoneum from what I supposed to be the uterus, I opened up a large abscess. After the escape of about one quart of pus, the tumor vanished and the uterus was easily felt, apparently normal in shape and size. As this patient had no fever,

the inflammatory nature of the lesion was not suspected, and it was still further misleading that she was able to be about and attending to her domestic duties.

I would call your attention to a lesion of the large intestine that occurs frequently enough to entitle it to consideration as a diagnostic factor; I refer to carcinoma of the sigmoid and wish to stress its importance as a source of error in diagnosis, because it has fooled me in more than one instance. I was requested to operate on a middle aged colored woman for intestinal obstruction. A uterine fibroid was found, tightly impacted in the pelvis, and I thought this was the cause of the obstruction. When the patient was operated upon the tumor was found, but the real cause of the trouble was a carcinoma of the sigmoid, a complication that had been entirely overlooked. It often happens that what we consider the causative element turns out to be a very insignificant factor, while the true and graver condition is sometimes overlooked. A skiagraph of the colon might have been helpful in revealing the sigmoid involvement.

The accidents and complications of labor, as a general thing, are well understood and promptly recognized, but even in this department of medicine strange complications may arise and surprise us with startling developments. The unusual features of the following case, make it interesting enough to report. A young woman was delivered of her first baby, with everything about the labor apparently normal. She did well until the eighth day after delivery and then began to void bloody urine. The bleeding increased and it was finally impossible to empty the bladder with the catheter. When I examined her, there was a large tumor reaching up to the umbilicus, evidently a distended bladder. No one was able to offer any explanation for the anomalous situation, but the necessity for prompt relief made an operation imperative. Through a suprapubic incision, I removed a basin full of clots from the bladder, and then made a careful examination of the interior to ascertain the cause of the hemorrhage. I found a small papilloma on the anterior wall, which seemed to be the source of the bleeding, removed this small growth, and cauterised the base with carbolic acid. The patient reacted well and made a good recovery. I do not see how it is possible to make a correct diagnosis of such a condition before operation, but fortunately, under such circumstances, a correct diagnosis is a matter of secondary importance, the chief indication being the cure of the patient. The woman had never had any trouble with her bladder, and as her labor was normal, there seemed to be no causal relationship between it and the hemorrhage.

The various types of hernia furnish a large proportion of the emergencies encountered by the surgeon, and operation often shows some strange pathology. How often we see the evil and disastrous results of futile efforts to reduce a strangulated bowel by taxis. The

visual demonstration of the damage to the tissues by these ill-timed manipulations cannot fail to make a strong impression on the mind of a conscientious surgeon. I once operated on a man for strangulated hernia of 8 hours' duration, who had been etherized, and the usual methods for reduction continued for over one hour without success, so that there was no other alternative but operation. When the sac was opened a quantity of bloody fluid escaped, revealing a loop of bowel with a perforation in its walls large enough to admit the tip of the finger. A portion of the bowel was resected but this failed to save the patient. It is the usual thing for patients to attempt to reduce a hernia before calling for help, and once having acquired this knack they become as proficient as the doctors. When failure comes, as it will sooner or later, it is unwise to inflict further damage by manipulations on a bowel already weakened. Under such circumstances, it seems far better to give them the benefit of early operation. The curious history of the next case shows the danger inherent in some of these old, irreducible hernias. An elderly man, while loading hay, was thrown from the wagon and fell heavily to the ground. I saw him a few minutes later and found him in profound shock. He was taken to the hospital and I then discovered a large, irreducible, inguinal hernia, which the patient stated was of long standing. The history and clinical findings led me to make a diagnosis of strangulated hernia. Operation was advised but the patient would not consent, and he was not operated on until 5 hours after the injury. The hernial sac was then opened and the loop of bowel within seemed uninjured, but strangely enough there was a rupture of the bowel at the neck of the inguinal canal. A rupture of the bowel might have occurred from such an injury, irrespective of the hernia, but it seems to me that the fixed position of the bowel at the neck of the sac concentrated the force of the trauma at the point and was directly responsible for the rupture.

Strange postoperative complications may ensue, long after the performance of the original operation, and the history of the next case illustrates a condition that seems to me to be unique. Many years ago, a man was operated on by an eminent surgeon for carcinoma of the rectum. After a preliminary colostomy, the lower segment of the rectum and anus was removed. About 6 inches of the distal portion of bowel below the artificial anus was left, terminating in a blind pouch or cul-de-sac. This dead end of bowel was, later, a source of much annoyance to the patient. The mucous secretions formed hard, scybalous balls that caused enough irritation to necessitate their removal by irrigation at intervals of every few months. One evening, while I was using a syringe for this purpose, the patient suddenly complained of a severe pain, became pale, and gave other evidence of severe shock. For a time I was in a panic, thinking perhaps I had perforated the bowel by my manipulations. I examined his abdomen and found a double hernia, for which



he was wearing a truss. The hernia on the right side was evidently unreduced when he applied the truss, and the pad was making a strong pressure on the incarcerated bowel. He told me that he had secured a new truss that day but it was very uncomfortable and made him very sore. I attempted to reduce the hernia and apparently succeeded, as the swelling disappeared, and I felt and heard a distinct gurgle, but the pain persisted until I gave him a hypodermic of morphia, after which I sent him home. A little later, feeling anxious about him, I called at his home and found his condition very unsatisfactory; his abdomen was swollen, tender, and the pain was increasing in severity. When he began to vomit I thought the hernia had slipped back en masse, with a possible internal strangulation. I suggested removing him to the hospital for operation but this alternative met with a firm refusal. He grew steadily worse and died on the fifth day, from what seemed a septic pneumonia. This was one of the earliest operations for rectal cancer, and the surgeon who did the work was so justly proud of his success, that he had kept in close touch with the patient, and had suggested to him the advisability of providing, in his will, for an autopsy, so that humanity might benefit from the knowledge acquired from his case. The autopsy showed a very singular pathologic condition. In what had been the pouch of Douglas, deep down in the bottom of the pelvis, a loop of ileum was found, tightly constricted by a strong fibrous band of tissue extending from the distal extremity of the dead end of bowel and being attached to the side of sacrum, where the bone was removed at the time of the original operation. It seemed singular, but nevertheless true, that this man should be able to pass gas and have regular movements from the artificial anus until the end, but this mystery was explained by the condition of the bowel above the constriction. Beginning at this point, and extending 4 inches above, 2 adjacent loops of ileum had become glued together, and an opening had formed between them, restoring the patency of the intestinal canal. In other words, nature had performed a lateral anastomosis on this patient. If he had consented to an operation in the beginning, I believe that his life might have been saved.

At another time I was called to see a woman, with acute symptoms of abdominal trouble, who had not had a bowel movement for several days, and was having pain, vomiting, and the syndrome of symptoms typical of peritonitis. She gave a history of having been operated on for some pelvic condition many years before, and I decided that the obstruction was due to some bands of adhesion following that operation and advised her removal to the hospital. She withheld consent to any more surgery for 4 days, by which time her condition was so desperate that she yielded. A surgeon was called in consultation from a distant city and, after examining the patient and listening to the history, he diagnosed a perforating gastric ulcer and proceeded to operate. The lesion proved to be a strangulation and gangrene of the bowel, caused

by tight bands of adhesion extending across 2 loops at the pelvic brim; 18 inches of the bowel were resected but the patient failed to rally and died 8 hours later. Another life that might have been saved by an earlier operation.

Gall-bladder surgery furnishes a fertile field of activities for the surgeon, but an actual rupture is not often seen. The symptoms of such an accident have been described vividly enough to convey the impression that the condition is easy to recognize. The history of the next case shows, as a matter of fact, how easy it is to make a wrong diagnosis in these acute abdominal emergencies. A middle aged woman had been ill for 5 days, with symptoms that led the medical attendant to make a diagnosis of intestinal obstruction. It often happens that a consultant is not called until late in the case and when I saw the patient she was seriously ill. The abdomen was swollen, tender; fever and vomiting completed the picture of peritonitis. She had always been healthy and there was no history of any symptoms indicating the gall-bladder as the active factor, even though her age and general physical appearance made the diagnosis of gall-bladder disease probable. She was taken to the hospital and operated upon immediately. The abdomen contained a large amount of yellow fluid, the intestines were adherent, and there was evidence of a diffuse peritonitis. When the gall-bladder was exposed, a perforation was seen from which a number of stones had escaped, and these were scattered throughout the upper abdominal cavity. The perforation explained the peculiar nature of the fluid, which was evidently bile mixed with peritoneal secretion. She reacted after the operation, but soon developed a severe jaundice and died on the second day. The nature and extent of the lesion were certainly a distinct surprise to me, but I think an earlier operation might have saved her life. The experience certainly supplies convincing reasons for early operation in acute abdominal emergencies.

I have found that carcinoma of the stomach has symptoms similar to gall-bladder conditions, and unless every detail is considered, and the case studied from every angle, the surgeon may easily make a mistake in diagnosis. I was called in consultation to examine a man, aged 75, with a severe jaundice. Health had been good until 3 months before, when he had a typical attack of grippe, from which he never fully recovered. He complained of pain in the epigastrium, had some cough, and vomited after taking food. He was slightly tender over the region of the gall-bladder, and was intensely jaundiced. While the possibility of malignancy was considered, I felt that the trouble might be due to some gall-bladder lesion following the grippe infection. The patient and the family were frankly told of the uncertainty of the diagnosis, and also of the dangers of an operation, but he decided to take the slight chance that surgery offered for relief. After separating some adhesions, the gall-bladder was exposed, and found distended with dark,

viscous bile; no stones were in evidence and I made further search along the common duct for some obstruction to account for the jaundice. At the pyloric end of the stomach, I found a hard, fibrous growth having the appearance and feel of a carcinoma. In its peripheral expansion, the growth had surrounded the common bile-duct, causing an obstructive jaundice. The clinical history of this patient, together with the enlarged, palpable gall-bladder, had tricked me into a wrong diagnosis.

I will cite another instance where a mistaken diagnosis might have had disastrous results for the patient, and have caused the surgeon lasting regrets. The literature of medicine records cases of aneurism being mistaken for other conditions and operated on, with tragic consequences to the patient, yet I never took the possibility seriously until I nearly made the same grave error myself. A colored man about 50 years of age was under observation for a large abdominal tumor. The mass was located in the upper abdomen and seemed firmly fixed to the underlying viscera. No definite place of origin could be determined, although it seemed to have some connection with the liver. The patient suffered much pain, had lost flesh and was clamorous for relief. The case was discussed from many angles, aneurism being considered among the possibilities, but against this theory was the absence of any thrill or bruit over the mass. It was finally decided to do an exploratory operation to clear up the doubt. I expected to find a malignant growth of the liver, or possibly a gumma. As soon as the abdomen was opened I had a presentiment of trouble that induced me to exercise great care in my examination. Under direct vision, I traced the relations of the tumor upward and found that it took its origin from the first portion of the abdominal aorta. The mass was, in reality, a large organized blood-clot, and why I did not put my finger through a soft spot on its walls has always been a mystery to me. I have never forgotten the thrill, and many times since, when operating for obscure conditions, it has come before me like a bad dream.

So far, I have confined my recital to major surgical conditions, and I feel that reference to a minor problem, wherein I made a dismal failure in diagnosis, will be a suitable termination for this paper. The patient was a young lady, and had been treated for cervical adenitis. The abscess was duly incised, drained, and in time seemed to heal properly. A short time after the wound had closed, the patient had a recurrence of the swelling, with systemic disturbances, and returned to me for further treatment. I could see no reason why the abscess should refill, and so, when I opened it the second time, made a larger incision and a more careful examination of the interior of the swelling. This time I discovered that it was lined with a well defined membrane which extended up under the floor of the mouth and deep down in the neck, to the region of the hyoid bone. This explained the situation, and I knew that the trouble was due to that rare condition, a thyroglossal cyst.



In conclusion, I realize full well that this paper does not offer anything new or valuable to medical science, but only details some of the mistakes and pitfalls of surgical diagnosis, without suggesting any way by which they may be avoided. But it must be understood that we are dealing with vital phenomena, the laws of which are so little understood. There are great revelations in science; we must content ourselves with the little knowledge we can slowly acquire from observation, from personal experience, and from the experience of others. What is obscure and baffling should only stimulate us to greater effort, and to the employment of every available resource, in laboratory and clinical investigation, toward the realization of perfect diagnosis.

#### DISCUSSION.

**Dr. J. Harris Underwood:** Dr. Glendon's frankness is something to be encouraged; if we would all be as frank, I think we might each recite a few surgical mistakes. My own mistakes have, I believe, been inversely proportionate to my study of the case beforehand. That may not be true of all of us, but I think it is applicable to a great many. If we would pay more attention to the patient's history as given by the physician who sends the patient to the surgeon, I think we would probably make fewer mistakes.

**Dr. G. K. Dickinson:** I could not hear all that Dr. Glendon said, because of being too far away, but I would like to say that if I were asked as to the best book to give a medical student I should recommend Wellman's "Art of Cross-Examination", a legal book. Any man who understands physiology, who studies physiologic conditions and who thinks in terms of physiology, normal and abnormal, will make fairly good diagnoses and will have but a small number of postdiagnostic surprises. I begin to feel that we should sit by the patient and let him talk, asking him questions and cross-examining him, having all the time in mind some physiologic thought explaining the symptoms he presents and seeking a thorough analysis of that symptomatology. If we have a right to call our opinion a diagnosis, it must be based on some such effort as that.

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### DERMATOLOGY AND ITS RELATION TO GENERAL MEDICINE.

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(Presidential Address at the Annual Meeting of the Academy of Medicine of Northern New Jersey.)

In seeking a topic for an address I thought that a few features regarding the progress of dermatology and its relation to general medicine might be of mutual interest.

Dermatology holds a rather unique position; for unlike other branches of medicine which are restricted to certain organs, or in which the development of special technical knowledge is required, it cannot be regarded as a separate study. As a specialty it may be summed up

as resulting from the accumulated knowledge of the skin manifestations of disease, whether of internal or external origin and including both medical and surgical conditions. Its scope is, therefore, almost unlimited and no hard or fast lines can be drawn that would limit its range.

The study of the various skin lesions, isolating clinical entities and grouping conditions of similar character under special headings has been most successfully accomplished, and from the chaotic grouping of former times a well-founded distinction regarding these various conditions has resulted in our modern classification, which depends upon separating diseases according to their conspicuous characteristics, which may be anatomic, physiologic or etiologic, as originally adopted by Hebra.

Thus it may be said that dermatology has succeeded to a remarkable degree in separating and correlating under special headings the various manifestations of skin affection, and the clinical descriptions of these conditions has likewise been advanced to a high degree of perfection, so that anyone reasonably familiar with skin conditions can usually designate almost every case that comes under observation. This, of course, has been a wonderful accomplishment, but when we look at what has been done regarding etiology we are not quite so well off, especially as to internal causes, which should become the problem of the future if we are to advance, and here the dermatologist must seek coöperation with the internist and laboratory worker, for it is hardly possible that men practicing dermatology can devote the time necessarily demanded in research work and keep up to clinical requirements, or give to internal medicine sufficient consideration to keep abreast of the rapidly accumulating knowledge relating to general medicine. By coöperation a more general interest in skin diseases would be created with a resulting benefit to all concerned. The general practitioner would find many symptoms of diagnostic value, the laboratory worker problems for research work, and the dermatologist would benefit in a broader knowledge of internal medicine, which modern dermatology is demanding, and would no doubt tend to a better understanding of many skin affections arising from internal sources.

No class of men have worked more diligently and so far as external causes are concerned they have succeeded in establishing the causative factors in the majority of local conditions, particularly those of parasitic origin. If we refer to our modern text books we will find approximately 80 conditions that have been studied and classified under headings corresponding to the morphology of the responsible organism. This chapter has been well written, beginning shortly after the discovery by Schwann in 1837 that yeasts were living organisms and the cause of fermentation; the demonstration by Shönlein in 1839 of the achorion in favus, and a year later, the description by Gruby of the fungus of ringworm.

The controversies in the progress that resulted during the following years would be interesting and perhaps instructive had we time for detailed discourses. Confusion naturally resulted and continued through many years, for even 30 years later we still find conflict regarding the acceptance of the parasitic nature of these conditions among the leading men of that time. Gradually, however, with the improvements that occurred in microscopic technic, this group has developed and is still being added to as research work in this line continues.

Separating conditions under headings according to the specific organisms has been a great step forward in constructive work and the detail with which this has been accomplished will compare favorably with the advances made in any other field. As an example, if we turn to the chapter on ringworm, we find that the originally conceived idea that this condition in all locations and all clinical variations was caused by one fungus, has given way, thanks to the elaborate investigations of Saboraud, to the belief that it may be due to over 40 varieties of fungi. This explains the variance of clinical manifestations in some of these conditions and also covers some conditions that were previously considered under eczema.

To the old classical type of circular lesions involving any part of the body and scalp, spreading peripherally while they cleared in the center, has been added the sharply defined scaly inflammatory lesions of the axilla, which were regarded as eczema marginatum, and also the similar conditions involving the crural region designated as eczema cruris. During recent years considerable progress has been made regarding involvement of the hands and feet in an eczema-like eruption which was originally described by Djelaleddin Mouktar in 1892 as a type of ringworm; but little notice resulted until 1908 when Whitefield outlined the classical types as the acute vesicopustular, chronic intertriginous (between the fingers and toes) and the hyperkeratotic type of the palms and soles. In 1910, Saboraud demonstrated the organism as being identical with that found in eczema marginatum. Greater interest, however, resulted following the résumé of the subject by Ormsby and Mitchel, who added the study of a large group of cases, microscopically confirming the findings of Saboraud and placing the varied manifestations of this infection more forcibly before the profession; for what was regarded as a rare condition has by reason of being better understood taken a foremost place in the common ailments affecting the skin, and from being an intractable, recurring, troublesome affection, in many instances running over periods of 15 to 20 years, has, owing to the recognition of its parasitic origin, been placed in the category of easily curable conditions.

The isolation of these parasitic conditions, separating them from eczema, has resulted in further clearing our conception of this condition, and, by adding to the above dermatitis seborrhoeicum, which was



separated from eczema by Unna, we have probably the 2 most common affections that formerly helped to swell the list of cases grouped under this head. Unna advanced the claim that seborrhoea sicca, pityriasis capitis and some chronic forms of circumscribed eczemas were due to the same cause, and described a coccus grouped in mulberry masses which he termed the morococcus as the etiologic factor; and while this has not been accepted generally, his views regarding the relationship of the protean manifestations of this disease, from a single pityriasis to all degrees of inflammation with exudation and crusting and involving part of the skin surface, but usually beginning in the scalp, have been clearly established.

The etiology of eczema has always been a favorite topic for discussion, and is now being gradually solved by its elimination as an entity, in finding the various causes that produce this type of inflammation and their proper classification. Eczema was never considered as due to a single cause, but a predisposition was supposedly present in all cases, which was the deciding factor in its production. Thus, the local exciting causes which might produce a simple dermatitis could also be responsible for eczema in a susceptible individual. This view was advanced by Bateman over a hundred years ago, when he described it as a noncontagious eruption of external or internal origin, due to a great variety of irritants, in a subject whose skin was constitutionally irritable. This view served a very valuable purpose in correlating many conditions of similar clinical manifestations and intimated the possible source of their production. As to the outcome, whether we still cling to the title eczema for these inflammations or substitute dermatitis would seem to make very little difference when we consider that the cases that can still be regarded as eczema are exceedingly few in number. Eczema, which was considered the most common skin ailment 20 years ago, has found its way almost to the bottom of the list. Professor George Henry Fox, who jokingly remarked to his class that if we diagnosed every case of skin disease that came in the office as eczema we would be right about 75% of the time, could not today employ his joke.

Considered as an inflammatory reaction to an irritation, of either external and internal origin, most of the progress thus far has been made in isolating the external causes; regarding internal causes, although many conditions are mentioned as contributory, no very definite solution has been offered. In consideration of the importance of finding an explanation of the early involvement of the blood-vessels in these inflammatory reactions (for the vessels of the skin are not distinct from the general circulatory apparatus), is not this a field worthy of our combined interest and investigation?

For many years it has been my custom to have an examination of the urine as a routine measure in all cases of eczema in which the inflammation showed a disposition to become generalized, and also in cases

that affected the folds of the skin about the neck and groins, where increased sweating seemed to be a factor. The urinary findings in these cases have been abnormal almost without exception. In cases of the recurring type, albumen, hyaline casts and blood-cells were very frequently found. The most constant change, however, and this occurred almost constantly with or without other abnormal constituents, was an increase in the acidity. Calculated by the titration method against decinormal sodium hydroxid solution, adding potassium oxalate to neutralize the effect of the phosphates in the readings, 100 c.c. of urine requiring from 20 to 30 c.c. of sodium hydroxid for saturation was considered as normal. The degree of acidity most frequently ranged from 40 to 65 or 70 and in a few as high as 100 or more. The specific nature of the hyperacidity was not determined; its character could not even be classified as organic or inorganic, as some specimens with high acidity showed very little organic acid while others proved the reverse. We are undoubtedly concerned with the errors of metabolism as oxidation products but the solution is still very indefinite.

Pathologically, the presence of blood-cells, albumen and casts calls attention to the destructive changes in the kidneys, with the consequent retention in the blood of abnormal constituents which find their way to the skin, but the presence of an increased acidity can not easily be explained; yet, clinically, as expressed in the inflammatory reaction in the skin, this points to the solution of the problem and likewise probably indicates the earliest signs of danger from errors of metabolism.

With this superficial knowledge we have treated these cases along the lines indicated, attempting to lower the acidity by increasing the basic while modifying the acid articles of diet. Alkaline remedies were also added in sufficient amount to render the urine alkaline or nearly so. Baths of sodium bicarbonate, with an ointment of bismuth and starch as a protective to inflamed areas, constituted the only local treatment. The results, judging from a large group treated during a period of many years, were very satisfactory; this was especially so in the early cases and in those in which the hyperacidity decreased rapidly. In many cases showing a trace of albumen and hyaline casts, the urine became negative and remained so. In cases with well-marked symptoms of cardiovascular disease, the progress was slower and relapses were more frequent. Many of these cases, however, finally responded as the treatment was persistently followed, extending sometimes over periods of a year or more before the skin lesions subsided. In a few cases the acidity remained high in spite of any kind of treatment and in these individuals the skin lesions persisted either as a severe pruritus or varying degrees of inflammation. The urinary findings in these cases with the definite improvement in skin manifestations depending on the possibility of reduction in the acidity has been most interesting and gratifying, and offers a large field for further study.

Recently Schamberg and Brown, studying the blood in a group of dermatoses, found an excess of uric acid in a large percentage of cases of eczema and pruritus, in some of which uric acid was also found in the epidermal scales, a few apparently showing a parallelism between blood uric acid and uric acid values in the scales. This would seem to substantiate the claim of Tilbury Fox, made over 40 years ago, that uric acid reached the skin through the capillaries and acted as an exciting factor in the production of eczema. Their results in treatment on a purin-free diet, in which they excluded meat, fish, fowl, internal organs and meat soups, allowing milk and eggs, were very good; many rebellious cases which had resisted other plans of treatment for long periods, were cured or rendered entirely comfortable. It is interesting to note, however, that their experience with a few intractable cases corresponded with our own. In these cases the uric acid content remained high even though such patients claimed to have rigidly observed the diet restrictions. The solution of this feature is not clear, but as Schamberg reasons, the retention of uric acid is due to failure of the kidneys to eliminate this product and a correction of this condition would be more difficult in some cases than in others.

These conclusion, taken together with the isolation of many local causative conditions relating to eczema, are indicative of the trend toward solving the problems of this complex inflammation and it is especially to be hoped that research work along the lines adopted by Schamberg will be continued. This should make an interesting field of study for the internist, for as indicated, such conditions as pruritus and recurring inflammations of the skin are symptomatic and perhaps the earliest signs of kidney dysfunction, and furthermore, these conditions commonly occur before reparative measures are impossible.

Preventive medicine must finally prevail. We should, therefore, become alert to the earliest signs of disease rather than to the end products which the pathologist so well defines, but which should be considered from the standpoint of our shortcomings in prevention. In line with this thought, who can forget our conception of the treatment of syphilis 20 years ago, when it was the custom to wait for the onset of the secondary lesions to verify the diagnosis, being content with cauterizing the initial lesion and the application of mercurial lotions, while the organism was invading the entire system. This is not intended in the sense of disparagement, for the only wonder is that we were able to do as well as we did with the limited means at our disposal. There is probably no other condition that has received more study during our period; and as an example of what can be accomplished by coöperative work it stands as a model of success. From uncertainty in diagnosis we have, due to the development of the dark field as a means of positive diagnosis in the earliest period of infection, and in the Wassermann test, arrived at methods of verifying the diagnosis



at any period of the disease. The improvement in treatment, due to the wonderful discovery of Ehrlich in which he gave us salvarsan, has brought the condition practically under control, only awaiting a more intensive campaign to obliterate it altogether, for it does not seem logical that a condition that can be controlled so readily will continue to be tolerated as a menace to our sociologic advancement. We have succeeded in placing syphilis beyond reproach from a medical standpoint, but as Ormsby pointedly remarked in his address as President of the American Dermatological Association: "Public opinion is gaining ground that the problem of venereal disease is not being adequately handled", and he called attention to "a group of business men who had organized an institution for the treatment of venereal diseases which has had remarkable success." These men had army experience where they saw the problem handled in wholesale fashion and decided to put into operation in civil life the measures that were successful in the army. He advises that if a more intensive effort is to be made in handling this problem through more comprehensive and efficient treatment, that this should be done by physicians and not by a group of business men. This method of procedure is not clear, but an organized effort is strongly urged and should form a topic for more general discussion in which the whole profession should become interested, for we are all vitally concerned.

Considering some of the rarer though not less important conditions that might be of mutual interest, we could include pruritus, which although considered as an independent disease is usually accompanied by some constitutional ailment or defect. In the text books, we find an attempt at designating types: as for example, pruritus senilis, ascribed to atrophic changes occurring in the skin beyond middle life; pruritus hiemalis, or frost itch, developing in autumn or winter and disappearing in early spring; bath itch, in which the pruritus develops as the result of bathing; also some localized forms like pruritus ani, pruritus vulvae, pruritus narium, etc. These classifications are probably useful, but not conclusive. Were we to consider the conditions in which pruritus is present, we could include almost any of the functional or organic diseases in which a disturbance of the nervous system occurs. From this viewpoint it becomes an important study, for it is often the earliest subjective symptoms in diabetes and nephritis. It is likewise prominent in diseases of the intestines, particularly the rectum, liver and gall-bladder. It may constitute an early symptom in internal carcinoma, and is frequently present in such toxic disturbances as tuberculosis and focal infections. Adding conditions that involve the genito-urinary tract, in which vesical calculi or stricture with retention may be a factor, we have a diversified field for investigation in pruritus, and the outcome in many of these annoying and intractable cases will depend on finding the cause and its amenability to treatment.

Next we might add focal infections, which as a topic of general

interest is being so widely discussed. This problem has probably no better field for study than is offered in dermatology. Here we can include the tuberculides occurring clinically as papules, which develop slowly, with characteristic central necrosis, resulting in permanent scarring. These lesions are frequently associated with tuberculosis and inoculation experiments have been successful in proving the presence of tubercle bacilli, yet there are many cases in which they could not be demonstrated and in which other microorganisms were found, giving rise to the prevailing opinion that this type of lesion is the result of a skin reaction to various types of bacilli. In this group we can include lupus erythematosus, which is at present also considered as a skin reaction to the toxins of several microorganisms, rather than as it was formerly held to be due to the toxin of tubercle bacilli alone. We might add to the above the toxic erythemas designated as erythema multiformi, including erythema nodosum, also the group of similar conditions classified under purpura hemorrhagica but symptomatic in diseases of toxic origin, as for example its occurrence in connection with septicemia, pyemia, and particularly in septic endocarditis and acute infectious diarrhea in children, also its association with joint pains, as in Schönlein's disease and the chronic recurring type of Hanoch which combines erythema multiforma and purpura as the skin manifestations, accompanied by intestinal crises associated with pain, diarrhea and vomiting. These infections, varying in clinical manifestations according to types of infection, are extremely interesting in calling attention to classic skin reactions to certain toxins from foci of infections not located in the skin itself, and should be regarded as of great diagnostic value.

To the problems of food allergy and anaphylactic reactions to proteins, we can add urticaria which in dermatology has for many years been regarded as the result of individual sensitization to certain articles of food; also the related condition, angioneurotic edema, in which an added nervous condition is generally present. Great credit is due to the workers in dermatology for establishing these causative factors long before anaphylactic phenomena became generally known. The responsible article for such conditions was determined by placing the patient on a test diet consisting in the beginning of milk only, which was continued until the eruption ceased and then one article was added to the diet each day and recurrence of the eruption indicated the article to be omitted. This has been a very useful procedure and from the standpoint of treatment is still the method of choice. The newer method of skin reaction tests, with the various proteins, covers a more diversified field but the results have not thus far come up to expectations. This should not, however, be interpreted in the light of failure when we reason that so many different processes that have a bearing on the possible production of these reactions are to be considered and explained before

settlement of the phenomena of individual hypersensitiveness to foreign substances can be finally solved.

It would be vain to attempt to enumerate all the conditions of common interest that could be discussed, for they are many and some perhaps of more interest than those that have been touched upon. The object of this discourse was to bring to your attention a few conditions to show that dermatology, in advancing is establishing a closer relationship to the problems that concern general medicine, and also with the added hope that more interest in these conditions might possibly be aroused for our common benefit.

This leaves us with the final question of how this is to be put into practice. May I suggest a method that occurred to me as a possible means to this end, in the development of a section of the Academy to be known as the Clinical Section, in which we could include under a common head all the medical specialties, taking in those outlined by the College of Physicians, including Cardiology, Diseases of the Lungs, Gastro-Intestinal Diseases, Diseases of the Kidneys, Metabolic Diseases and Neurology, adding to these Dermatology and Syphilology; also any branches in which a common medical interest is manifest. The character of such a section should in the main be clinical and practically limited to the presentation of cases of unusual general interest and including cases for diagnosis.

In such an organization many little details would have to be worked out, and during the coming year, if this plan as briefly outlined meets with your approval, I hope to have the privilege of discussing the mode of its operation.

In conclusion, I wish to extend my thanks for the honor conferred in choosing me as your President, and to retire with feelings of regret. Our association during the past 2 years has been most pleasant, and I take this opportunity of thanking the Council and Members for their helpful support in furthering the interests of our Academy.

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### NEGATIVISM IN CHILDHOOD.

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(Read before the annual meeting of the New Jersey State Medical Society, Atlantic City, June 19, 1925.)

Emerson points out, in his essay on "Self-Reliance", that a baby dominates a household because it is the only one that knows definitely what it wants and insists on getting it. This reliance would hardly avail if it were not for the affection that the child's helplessness inspires. That



very helplessness and gracious awkwardness of the child awakens our sympathy from the moment of birth.

Two controlling factors are present in all life as interpreted by Galton, nature and nurture, or heredity and environment. With the new-born, heredity has performed its best or its worst and can be reckoned with only in the sense of cherishing and developing the best potentialities and predispositions, and all the worst avoided. The question of environment and nurture being of the present, now assumes the greatest importance. The higher the animal, the more important become nurture and environment. This is especially emphasized in the human race by the prolongation of the period of infancy.

John Fiske was first to elaborate this fruitful view of one of the fundamental laws in higher evolution. This long period of helplessness in infancy is an age of extreme plasticity, when the career of the individual is no longer predetermined by its ancestors. One generation of the lower animals is nearly a prototype of the preceding one. The young animal is born almost fully formed and can partially or wholly dominate the environment at once or shortly after birth independently of the parent. The more protracted the stage of infancy of an animal the longer is its period of adaptability and teachability, and a slow birth typifies an increase both in capacity for development and higher prerogatives. The babyhood of higher apes embodies a period of 3 months during which time they are solely dependent upon the parent. The human infant is distinguished from the lower animals by the much longer duration of helpless infancy and the marked increase in the size of the brain, particularly in the extent of its surface. During the first 2 years of life, the brain not only doubles in weight but increases marvelously in its convolutions and complexity. It is evident that correlated with this long period of infancy, there must be a time of maternal care and watchfulness if the child is to find its way into normal adaptation to its surroundings and, in order to minimize all sources of error, a careful study of all the phases of infancy in childhood is of vital importance alike to physicians, parents and society at large.

Significant changes of a psychologic nature take place early in the personal economy of the infant, since from the moment of birth demands of one kind or another for adaptation to reality begin to assail him. At this time the new individual begins to be exposed to the countless influences which life brings with it and which go to determine the mass of memories, habits and resources which are employed in the task of adaptation. Impressions register on the infantile brain, even though in an immature manner, of sufficient depth to create a more or less lasting influence. The not uncommonly met with "spoiled baby" will cry for a definite purpose, it may wish to be picked up. The baby is lifted from the crib, its cries immediately cease with the first sensation of motion. Similarly, with the elimination of the 2 a. m. feeding, the

infant manifests its desire for the accustomed feeding in arousing the household; substituting a bottle of water or an attitude of healthy inattention quickly impresses the baby that its whims will not be responded to and soon it will accept this change of routine as a matter of course and with the passing of a few nights, the former nightly interruptions have passed into oblivion.

Here in the cradle lies the foundation of regularity in habits and responsiveness to sound habitudes. The human infant in spite of the wondrous potentiality which he carries with him to develop into the reasoning adult is by far the most helpless and dependable of infants, and thus subject not only to his own laws of development but to experimentation with these doctrines on the part of untrained parents. As Glueck points out, the situation has become particularly aggravated in late years with respect to the "puttering" by untrained parents, on account of the mass of trashy literature on the subject of bringing up children. The important point that is usually ignored by these "Guides for Young Mothers", etc., is that no 2 children are quite alike in all respects and no method of child rearing has as yet been devised which would meet the requirements of all cases. It may be difficult to train a child to take nourishment, or to attend to calls of nature at certain convenient intervals, or to go to sleep naturally without the necessity of lulling influences like swinging the bed or rocking the cradle, or the thoroughly pernicious habit of stroking or rubbing some part of the child's body for a time. These babies, from earliest infancy, may manifest a certain amount of stubbornness which becomes more firmly rooted with the passing of time, so that with the advent of childhood the negative phase is implanted to great depth, due to the extreme flexibility in the parental attitude. These wilful but otherwise normal children dominate their parents with those powerful traits inherent only in them, obvious even before the period of connected articulation, and even more commanding is their very helpfulness when accompanied with a few meaningless tears. These infants are obstinate but their wilfulness should be opposed by increased stubbornness in the parent.

One of the fundamentals of child training, is that the parents should present a united front. In the matter of feeding, as the infant is offered other foods necessary to proper development it must be made to comprehend that the choice of foods is in no way whatsoever within its own jurisdiction, and it must accept without protestations. If refused, no food at all should be given until the advent of the next meal. At times, in the weaning of obstreperous babies, it is necessary to withhold the breast for 12 to 24 hours before the obstinacy of the nursling can be overcome. Meal time has for its specific object the ingestion of food and it seems best that the child should eat at his own table in the period of early childhood, and if necessary during later childhood. No outside activities should be indulged in at meal time; one should refrain from

diverting the attention by such methods as singing, story telling, the playing of musical instruments, etc. Serve the food in an appetizing manner and prepare the vegetables so that they do not taste like wet dish rags. Sound inadvertance to naughtiness is often very helpful in eradicating certain habits in children who, soon realizing that they are no longer the centre of excitement, will eventually lapse into a state of goodness.

Many children have a "naughty stage" at 2 to 4 years of age, after which they seem to become more obedient. The reason is simple. At this age the idea of "what is good" begins to set itself against the strong sense of desires. The current is crossed by something under water; the ripples show it. Corporal punishment is justifiable toward certain types of perverseness, such as manifestations of cruelty, lying and meanness. Many an energetic toddler is scolded and told he is bad because he will not keep still. Many a mother considers her child naughty whenever he does not behave as she wants him to behave. *The truth is, that a child can only be considered naughty when he falls below his own standard of conduct.* The standard for the child is necessarily very elementary but he is capable of understanding that he must be cheerful, that he must be obedient and gentle. These attributes the parents have a right to demand from the child. The smallest baby can be taught not to whimper and whine, if the mother consistently refuses to take notice of him; the little child who has faith in the reasonableness of his mother's few orders will quickly learn to obey, realizing that the reason it is necessary for him to do so will be explained later on.

The child who has never been allowed to become bored with his toys but has had them quickly taken away the moment he shows a tendency to treat them violently easily forms the habit of treating all things gently. But the parent has no right to demand of the child that he habitually sit still for long hours at a time, that he submit to have everything done for him because it is "quicker for mother", that he should be at all times good-tempered when he has irregular meals, uncertain bedtime and ill planned exercise. Let the parents live before their children as examples of good moods and dispositions; let the daily associations of the home be full of good cheer and happiness; teach that sweetness of temper and forbearance be the rule; that affection and good-will be freely expressed; and emphasize the far-reaching effects of good comradeship and regard for one another's rights. The nature of the child as readily responds to these influences as the flower opens to the sunshine. But let the opposite condition prevail and the moods and dispositions of the children will be poisoned and embittered and their sense of healthy perspective become distorted. For moods obey the law of habit, and subconsciously copy the parental attitude. The silent influence within the confines of the home is a determining ascendancy in the building of personality of character. The difficulty in training a child



may reflect a lack of sense or a lack of stability and perseverance, or an unhealthy emotional indulgence on the part of the parent. The important thing, as Glueck emphasizes, is to maintain a healthy balance between an opportunity for the child for spontaneous development on the one hand, and intelligent guidance of the development of his potentialities with a clear vision of what good individual development is, on the other.

The babe comes into the world without disposition. True it has certain tendencies toward disposition, which we usually designate as "temperament" and we may credit or blame the child's temperament to heredity, but at the same time we must remember that the parents supply the greater part of the heredity that is immediately effective in determining such individualistic qualities as temperament. Independent life is inaugurated by conception, the union of 2 cells, the ovum and sperm cell. The influences of heredity are then closed as far as this individual life is concerned and any further influence upon development must emanate from environment. It has been said that after conception the mother is only a nurse to the child and as Chapin so aptly postulates, "after conception occurs the gates of heredity are closed"—meaning the biologic phase. Suppresssions and depressions are too frequently employed and may result in an unbalance of character. Undesirable trends in infancy and childhood may embody the insidious beginning of thrusting an adult into an unenviable mental condition. Too great attention cannot be given to such factors particularly in the first 5 years of life, since it is being recognized more and more that it is in the earliest years that the great tragedies occur that tend to seriously warp the individual expression of energy of later years.

The mental design of the child's life is formed in the first few years of life and, due to the individual and concerted efforts of certain psychologists, teachers and doctors, a solid and concrete body of knowledge inherent to children has been created. The outstanding benefits are obvious. We can see more clearly than before which are the more essential differences between the child and the full grown adult, and secondly, we must now confess that there are certain stages of growth and particular tendencies at each stage that are compelling to most children. By careful inquiry of the child's routine, and by observing the patient within the confines of his home, much needless medication can be eliminated for restlessness, constipation, loss of appetite, anemia, etc., for these manifestations may be either directly or indirectly obvious characteristics of a negative phase in this type of child.

Among the children even of the well-to-do the hygiene of the mind is often enough overlooked, and faulty management produces restlessness, instability and hypersensitiveness, which pass insensibly into a neuroses in later life. To prevent such disastrous consequences is one

of the most important functions in the training of children and sooner or later medical advice is sought. If the physician's intervention is to be followed by success he must be prepared to approach this problem from all angles; obviously it is necessary to exclude the presence of organic disease and if none is found he must explore the environment of the child in its entirety. Delving carefully into the daily routine of this child's life every hour of the 24, the opportunities for close observation of the children which mothers enjoy are so potential that it is extremely unwise to disregard their statements.

An example of an illustrative case is cited in the following: The patient is brought to the doctor with the chief complaint of constipation and when the child is placed upon the stool he acts in a most distressed manner. It goes without saying that conditions such as fissure of the anus, fistula, hemorrhoids, hypertrophied anal muscle, should be eliminated. The examination must not cease at this point and if inquiry is pursued and the management of the child is carefully inquired into, we will find that the crying and resistance are not only confined to this unsuccessful attempt upon the stool but also occur when the child is put to bed and quite frequently similar resistance is met with at meal time. It is safe to conclude that all these symptoms are due to the same cause, a negativism, which occurs with more or less frequency in children who have displayed a certain amount of wilfulness tempered with an attitude of urging and flexibility in the parents, and finally culminates in the condition exemplified by the parents displaying anxiety and distress over what their conduct occasions. It would be useless to attempt treatment by prescribing medication. The situation necessitates instruction to the parents so that they may appreciate the point of psychology involved and so eradicate the maladjustment. As Charcot has so ably asserted: "In functional disorders it is not so much the prescription that matters as the prescriber". The exaggeration of this negative quality, as exemplified in the child's declining of food, refusal to sleep, refusal to move the bowels, refusal to obey, becomes more frequent and habitual when the child's conduct visibly distresses the parent. Vividly is the child impressed by the surroundings in which he is supreme and he fully appreciates the distress he is creating.

If the doctor is to adapt himself harmoniously to the treatment of children he must not consider it beneath his dignity to study nursery life and nursery mannerisms, for in this environment lies the very essence of the beginning of things, the start of life. If control is active yet ineffective, if reproofs and appeals and unheeded expostulations are constantly passing from the mother, the child very often responds by developing the above characteristics of negativism, which is merely a symptom of nervous unrest brought about as a result of the inconstant attitude in the home. In order to combat negativism, parents and at-

tendants must relegate themselves more to the background allowing the children free play and when this wholesome neglect must be supplanted by interference it is best accomplished by an irresistible force. If punishment is necessary, the storm must be weathered by all means. It is well at this point to emphasize the presentation to the child with his good qualities and those forces which we wish him to achieve. The child cannot too early be taught to face reality and learn to appreciate the fact that life is a process of adjustment.

John A. Foote sums up the problem in these few pertinent remarks: "we cannot depend on the school or the church to train the child, we must rely upon the parents, who must be taught how to handle their children from both a physical and psychologic standpoint. Who is going to teach them? The physician must to a certain extent. The pediatricist is face to face with this problem. It is his responsibility to advise and to 'bring up' the parents". To conclude:

(1.) Training the infant in regular habits is essential to a happy adaptability in childhood and adolescence.

(2.) Displaying an attitude of stubbornness more forcible and lasting than that of the child will eliminate many negative traits.

(3.) Two histories are essential: a medical history and an environmental history.

(4.) Observe the child within the confines of his own home.

(5.) Healthy inattention is an excellent form of medication.

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#### TO AN UNKNOWN ANCESTOR.

By S. Omar Barker

My gifts have come to me far down the years:

I am the son of huntsmen of old time,

The heir of timid virtue and of crime,

Offspring of sluggards and of pioneers,

Inheritor of juggled hopes and fears.

Some gave me purity, some gave the grime

Of damaged souls. Some of them helped my climb

Toward God. From some came smiles, from others tears.

Oh, I am cluttered up with legacies

Long lines of jumbled blood have handed down,

Yet I thank God upon my bended knees

For him who, whether king or bawdy clown,

By making sympathy his conscious art,

Bequeathed the gift of kindness to my heart.



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NOTE.—The transaction of business will be expedited, and prompt attention secured if,—

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## PUBLIC INSTRUCTION IN MEDICAL MATTERS.

As a part of the Society's program for public education, and in association with the program for promoting Periodic Health Examinations now being presented to the County Medical Societies, arrangements have been made by the Editor to broadcast from Radio Station WHAR, Atlantic City, a series of "Ten Minute Talks on Keeping Well". These will be delivered every Thursday at 7:30 p. m., commencing October 22, 1925. At the same time, mimeographed copies of these "talks" are being distributed to a list of 150 daily and weekly newspapers of New Jersey, for release on the successive Fridays, with the request that they be published for the benefit of the community.

In this particular series of health talks the speaker will endeavor to gradually unfold and explain the general plan for prolongation of life through preservation of health. As at present arranged, the Radio Program provides for ten weekly talks, under the following titles:

1. The Medical Society of New Jersey—Its relationship to the community.
2. Periodic Health Examination—What does it mean?
3. Am I in Perfect Health?
4. An Ounce of Prevention.
5. A Stitch in Time.
6. Recovering Lost Ground.
7. Keeping Fit.
8. How to Avoid Infectious Diseases.
9. Focal Infections—How they menace health and life.
10. Teeth and Tonsils—What to do about them.

## PERIODIC HEALTH EXAMINATIONS.

We have previously explained in these columns the action of the Board of Trustees, later approved by the House of Delegates, instructing the Editor to present to the several County Societies an explanation of the plans for inaugurating and promoting Periodic Health Examinations. We have already had the privilege of addressing the societies of Burlington, Camden, Cumberland, Gloucester, Hunterdon, Mercer and Sussex counties upon this matter, and beg to announce again that we are prepared to accept invitations to appear before the other county organizations, and will be pleased if given the opportunity to carry on this work as rapidly as possible.

At the Annual Meeting we were authorized to procure a supply of Pamphlets of Instruction, (concerning the best method of conducting such health examinations), Guide Charts (to facilitate the examinations), History Record Cards (filing cabinet size 5x8) and Report Blanks, and to keep these on hand for sale to members at cost price plus sufficient to cover handling. We have complied with these instructions, have had the requisite forms prepared and printed, and can now supply members with any desired number. The cost of these necessary elements in the work will be:

Manual of Instruction	.20 each
Guide Charts	.20 each
History Cards and Report Blanks,	.05 each

These prices are made possible by purchasing in quantity and are, of course, lower than the individual could obtain if forced to have small lots made up for his own use. Only one manual and one chart are essential, and each member can determine how many history cards and report sheets he is likely to require. We might suggest as a minimum outfit to start with: 1 manual, 1 chart, and 25 cards and reports; a combination order that will cost but \$1.65.

We are ready to supply your demands. Let's get this work under way.

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GROUP INSURANCE.

Last month we called attention to the problem of Medical Defense Insurance, and we would once again urge you to give immediate consideration to this very important question. That you have thus far escaped a malpractice suit is no assurance that you will continue to be safe. Unreasonable, unjustifiable and indefensible suits have been instituted against some of the ablest members of the profession; indeed, there has seemed in some regions to be an epidemic of such suits. Any disgruntled patient (and most commonly the displeasure arises out of the physician's having requested payment for his services) can institute proceedings against you and, no matter how ridiculous his complaint

may be, seriously injure your reputation; and you have no redress. It has even happened that proceedings of a most unjust and unfair character have been pushed and that ignorant or misinformed juries have awarded verdicts of heavy financial damages against the physician or surgeon. No practitioner of medicine or surgery is safe against the blackmailer who is out to annoy him or to mulct him of money. Every honest physician or surgeon is perfectly willing to be held responsible for his work but he should certainly protect himself against the "strike" suit.

The "group insurance" plan of protection that has been negotiated for you by officials of the State Society is a device that inures to your advantage in every respect; it affords you the same kind and degree of protection you secure when you insure your property against fire. If a suit be entered, you will have the best legal counsel the state can afford; you will have the coöperative aid of your professional brethren; and, in the event of damages being awarded against you they will be paid by the insurance company. Perhaps better than this, the very fact that you are so insured will serve to deter the false claimant from starting a suit.

The cost of such insurance, of guaranty against mental worry and possible financial loss, is almost infinitesimal; since the annual meeting the United States Fidelity and Guaranty Company has made a further concession in rates and the small sum now charged for this insurance is such that a New Jersey physician can scarcely afford to be without it.

Write to Secretary Morrison at once and get the new rates applicable to yourself.

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#### POST-GRADUATE COURSES AT HOME.

Has your county society made any effort to take advantage of the opportunity offered by the State Society? Have you done anything toward that end? These "courses" will not come to you of themselves, you know. Knowledge always has to be courted; it rarely, if ever, seeks to impose itself upon you.

As you have learned from the "Transactions of the Annual Meeting", issued as a supplement to your August Journal, provision has been made whereby you may have excellent graduate instruction brought to your own "home town". You have available full explanation of the courses obtainable through the active coöperation of the University of Pennsylvania, explanation of what you shall do to obtain such instruction, and the question now is—Do you want it? All the preliminary steps have been taken for you; it is now up to you. Do not wait for some one else to start it; get busy at once, you, and urge the society, or, organize a group to profit by this glorious opportunity.

The time to act is now—during the early winter months.



## Esthetics

Vacation period, or the diminished amount of work that attends the summer season, gave most of us an opportunity to catch up somewhat on neglected reading. For some weeks prior to the commencement of vacation we had been casting longing eyes upon the two volumes of "The Life of Sir William Osler", by Dr. Harvey Cushing, and occasionally we stole an hour off our proper allotment for sleeping and, lying in bed, regaled ourselves with a few pages of this charming biography. Those of you who have not yet acquired this history of the life of one of the greatest physicians of all times should immediately purchase it; or, perhaps you might suggest to "the wife" or to some "G. P." that it would constitute a suitable birthday or Christmas gift.

For such of us as enjoyed an intimate association with Dr. Osler, at any stage of his career, every page of this book holds a fascinating interest. We can never forget his loveable personality, his charming manner, his deep personal interest in what we happened to be doing, the penetrating thought and kindly advice that helped us solve that problem, the active support he gave to any reasonable scientific or humanitarian project we presented—these characteristics endeared him to us so that we shall never forget, but, even to those most closely associated with him in medical work, this book will be a reminder of much that had escaped memory and a revelation of much concerning him that we never before knew. Cushing has given us a masterpiece of biography and in these pages we live with our beloved friend every step of the way—from the little old country school house in the then wilds of Canada to the comfortable retreat within the historic walls of Oxford University.

It would be almost sacrilege to "review" this book for you. It not only deserves to be read, it should be read by every physi-

cian who loves his profession and respects its great leaders. Here is depicted the life of one of the latter who, though of medium stature, physically measured, stood literally head and shoulders above any medical man of the last century. You will not only be interested, you will profit immeasurably by familiarizing yourself with the details of this man's life.

Returning from vacation to resume consideration of the problems of today, we found another interesting book awaiting us, a book of totally different character,—dealing not with the lives and characters of noble personages but with the opposite characters and characteristics, the charlatans of the profession and their ignoble pretensions—but still a book that practicing physicians would do well to read and ponder upon. In "Medical Follies", Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, has given us another very instructive account of the birth and development of several of the "cults" that have in recent years attacked scientific medicine and bamboozled the gullible portion of the public. Some of these fakes have passed away, some are rapidly disappearing, and some occupy the stage today. It is interesting to have them all set forth and explained in one book, that we may get a proper perspective of the entire subject of cultism, for when viewed in that way we shall be less excited over the possible effect each new one may produce.

At the present moment the medical profession is quite concerned about the latest of these cults and the preposterous claims to the right to "heal" the sick without "practicing medicine", and much thought is being given to restrictive legislation. Unquestionably, these pretenders should not be allowed to impose upon legislators and their efforts to procure legislative endorsement should be frustrated, but, beyond that it is of doubtful benefit for the medical profession to proceed. Aggressive measures on our part will always be misunderstood by the layman. Prohibitory laws are seldom

fruitful of desired results, and, as Fishbein points out very clearly, all such fakes and impositions die a natural death if let alone.

The answer to the several problems brought forth by the cults and cultism is probably the same now that it has always been—education and more education. Fishbein's book is written for the laity as well as for the profession, but every physician would do well to read it carefully in order that he may do his part toward disposing of these dangerous fads and fancies in the medical field.

## Medical Ethics

(Owing to a vacational absence from home and an unfortunate mishap that has interfered with his work, our esteemed contributor to this column found it impossible to prepare his regular material this month. We are, however, favored with an opportunity to use instead an excellent short talk upon Ethics that was recently delivered by one of the County Society Presidents, and we are taking the liberty of so publishing his paper.—Editor.)

### PROFESSIONAL CONDUCT.

William A. McMurtrie, M.D.,  
Morristown, N. J.

(Address of the Retiring President of the Morris County Medical Society, Sept. 29, 1925)

Dorland defines medical ethics as "The rules or principles governing the professional conduct of medical practitioners."

From earliest times there have been rules governing the conduct of individuals for the general welfare of their respective communities, and for those who choose an individual occupation there exist still more definite and binding customs among the participants of these special groups. When one enters the medical profession, he assumes the duty of abiding by the medical ethics of his time and place.

Many of the rules governing medical practice have passed into oblivion because they have not met the approval of succeeding generations, and new codes have been adopted to meet evolutionary changes as each generation of physicians has attempted to elevate the profession to a higher plane of efficiency. Laws are not enacted nor

customs accepted for the purpose of hampering honorable activities, either of individuals or groups, but for the general good of the people considered collectively, and they are absolutely necessary for our social and economic welfare,—our physical, mental and moral development.

Always, where laudable accomplishments have been attained by groups, there have been rules or codes *understood* and *obeyed*, making coöperation possible, for without coöperation any attempted endeavor degenerates into a pitiful failure. Only too often we see grim ruins of what might have been a great humanitarian structure had not the very foundations been weakened and the supporting pillars defaced by a few who, through selfishness or stupidity, would not or could not coöperate. And what is true in other walks of life is apparently as much a fact in our own profession, for we too have among us unruly men who pay but scant attention to some of our finer rules of conduct or medical courtesies, and who in their desire to bring ridicule on individuals, have brought an abundant measure of shame on our whole group. Who among us has not at one time or another been questioned by laymen regarding our apparent lack of co-operation, except in small circles or cliques? Laymen are very quick to catch the significant sneer or implied suggestion aimed at the ability or integrity of an absent colleague. And while the marksman has scored a hit to the embarrassment of the absent one, he has exposed himself to a return volley of fire, besides aiding in the destruction of the stability of the profession in the minds of his audience.

How much better it would be for everyone, ourselves included, if, when in the presence of a patient whom a colleague has treated, we would refrain from saying or doing anything that could be interpreted as criticism toward the physician preceeding us. I want to read here a quotation from "The Successful Physician", by V. C. Thomas:

"Do not criticize the treatment or diag-



nosis of your colleagues. There is little doubt but that this stirs up more distrust in the mind of the general public and creates more hard feeling among medical men than any other single factor.

"Treat the cases that come to you in the same manner that you would if they had never called on a physician before. Many cases of mistaken diagnosis will come under your care, and mistaken diagnosis will be made by you in an equally large number of cases. The criticism that you make of the other doctor, will but furnish him the opportunity to revenge himself when one of your errors comes to his notice.

"No matter how angry a patient may be at another physician, it will not elevate you in his esteem for you to furnish him with further fuel to feed his flame. Let other physicians build their own defense of their actions with their patients. If you can see nothing to be commended in what they have done, say nothing at all. The Medical Protective Company of Fort Wayne has found, after years of experience, that the majority of cases against physicians could never be sustained in court if other doctors did not assist in the work. If you take the trouble to inquire about this from someone who has been in practice for many years, he will tell you that you will have enough to do to keep your own fences mended without tearing down those of others. There will be enough complaints, both real and imaginary, about your treatment, to keep you busy without bothering about those of someone else."

With the number of those with malicious intent passing from one to another of us, we would still have enough to do to keep faith in each other, for none of us are immune from the scorching lash of the tongue of the liar and scandal monger.

In conducting quizzes in the war college in Georgia, I found that those physicians who never attempted to force their own ideas, and who were the most open to suggestion, were invariably the ones best qualified on the subject under discussion, and

my war-time observations have been repeatedly verified in private practice.

However, by far the greatest cause of discourtesy among ourselves is undoubtedly *misunderstanding*, and the other unfortunate traits just mentioned would gradually disappear, could we really understand the motives underlying the acts of those whom we most distrust. Physicians, more than any others, should be conscious of the finer sensibilities of their fellow men, and should therefore be more tolerant of their apparent short-comings. We have a great constructive work to do, but so long as some of us continue to take more pride in keeping the fires of purely personal and petty fights going, than we do in educating, serving, and preserving humans, there is no hope of coöperation, and therefore of accomplishing the big work. Let those who still insist on balking in the traces take the responsibility for the failures.

But for those members who are chiefly concerned with the problems of the honest practice of modern medicine, your retiring president extends every good wish for the future, knowing full well that through your efforts the work will go on, and the knowledge of having been professionally courteous to your colleagues will be much of your real reward.

## Medical Economics

### THE FAMILY DOCTOR.

"He [the physician] is the flower (such "as it is) of our civilization; and when that "stage of man is done with, and only remembered to be marvelled at in history, "he will be thought to have shared as little "as any in the defects of the period, and "most notably exhibited the virtues of the "race."

—R. L. Stevenson.

It is repeatedly said—sometimes by laymen, sometimes by professional men—that the Family Doctor, as a species or an institution, is fast disappearing. To this proposition gentle but firm exception may



be taken. Further, the assertion may be ventured that so long as humanity maintains its present evolutionary phase; so long as man's psychology is unchanged; so long as he continues his capacity to err and to suffer, whether physically or mentally; so long as in his extremity and insufficiency he requires helper, confidant, or adviser; equally long will the Family Doctor endure.

If it be said that the Family Doctor is undergoing a certain change in the quality of his work, and thereby assuming a different and withal more stable and important rôle in the body politic, assent may readily be given.

In the old days, with the horse and no telephone, the doctor, whether in town or country, had very distinct physical limitations to his sphere of activity. The specialist was equally limited. In the words of a dear old professor of philosophy once lecturing to his students on Leibnitz: "The limit of his peregrinations was somewhat circumscribed." In those days the specialist existed, indeed could exist, only in the large cities, and patients from outside his immediate environment must come to him. Consequently the acutely ill whom he could see were nearly all within a small radius. Chronic cases—"walkers" might and did come from some distance; but at inconvenience, and expense of time and money,—factors too often deterrent.

The gasoline motor and the telephone changed all this. The specialist, due to the greater ease of communication and travel, has been enabled to infiltrate the smaller communities; so that now, in a state like New Jersey, it would be hard to find a place so isolated that there are not specialists of some type located within 10 or 20 miles.

For the general practitioner the obvious result of his new situation is that he no longer is compelled by this isolation to open ear drums, perform complicated obstetric work, take out an occasional appendix or tap an empyema, pass on obscure nervous symptoms, treat pneumonia and a varied as-

sortment of chronic and acute medical and surgical conditions, all in one day. He is not *compelled* to do so. And the conscientious man, as most practitioners are, confronted by a task which he knows some one else can perform more efficiently, with undoubted better results for his patient, calls in that some one else. This is better for the patient. It is just as surely, though perhaps not quite so obviously, better for the practitioner. It helps to prevent too great dispersion of his activities; it relieves him in the stress of great responsibility; it allows him to devote more attention to medicine as distinct from surgery and other specialties, and so to develop himself more in whatever direction he may be most interested.

Professional men almost universally welcome this change as wholesome, and recognize the distinct improvement over the old conditions. The layman is not yet quite so willing to accept the altered condition as beneficial to himself. To him a doctor is a doctor,—should know everything and do all things. To many such, there is still a satisfaction in speaking of his family doctor as a "specialist in everything." However slowly, education nonetheless proceeds apace, and sooner or later communities become adjusted to the advent of the man of special, one-line ability. The irritation over increased expense in having to call in a second doctor at specialist's rates gives way to realization of increased safety in the hands of one who is devoting his entire time to a particular field. Comparison of results by patients who have had experience under both the old and the new régime is slowly bringing about an appreciation that the new has much to commend it over the old.

Meantime the great bulk of the active, valuable work remains, and always must remain, in the hands of the general practitioner. He is the backbone of the entire profession, and on his intelligence and capability the whole fabric of medicine must rise or fall. To his vast credit it is rising, and there is little in the present state of medi-

cal affairs to indicate that it will not continue to rise. Whatever specialists are called upon, their field, if they be honest men, is strictly limited. The practitioner continues the daily visitor to the stricken home, the adviser who directs the attack, though many times seemingly sinking himself into an humble background; to him, because they know him, have faith in his integrity, the family turn for encouragement or comfort; through him they gain confidence in the work of the specialist. The latter has been introduced by him and he is therefore as largely responsible to them for results as though the special work were done by his own hands. In his newer capacity his knowledge widens, he has more opportunity to study disease, and he better serves his patient and the family than ever before.

It may be that in the development of specialization the pendulum has swung somewhat over far. But in human affairs that type of overgrowth is often the normal process, and sooner or later corrects itself. One bad result of the overswing is that the general practitioner, with no special field of work, has developed—in the popular jargon—an inferiority complex. He does not realize that his position is impregnable; that his own intellectual achievement is as great, and often greater, than that of the man in the narrow, special field, nor does he as yet at all appreciate or utilize his own opportunities for study and research. The specialist too, because he is deeper versed in his particular line, is apt to lord it over the general man, to be just a little condescending, to take to himself all the credit for the relief of a dangerous situation, when actually the intellectual and higher credit belongs to the man who saw the trouble coming, made the diagnosis, knew what was needed, and called him in to do the plumbing.

Likewise this state of affairs will adjust itself. and while superficially it may seem that the Family Doctor is disappearing, closer inspection will soon reveal that he has but bettered and changed his outward form, that he has increased in stature and intelligence; and that solidly beneath it all he is still the friend in trouble, the wise, cool-headed counsellor of the stricken family, and, despite all the specialists on earth, the man whose hand must hold the rudder to steer the ship its proper course.

## Communications.

### HOSPITALS—OPEN OR CLOSED?

A Letter to the Editor from Dr. S. Rubinow, of Newark, N. J.

The article in the August issue of this Journal, dealing with the problem of hospitals is very timely indeed and of vital importance to the medical profession, represented by the Journal. The author formulates the question clearly. "Shall a hospital's professional staff be closed or open? Shall all reputable physicians in a community have access to all the hospital privileges and duties, or shall these be in part or in whole the pleasure and responsibility (and we may add—advantage) of a chosen few?"

In our opinion there is only one emphatic answer to these questions. Yes—a community hospital must have an open professional staff. Yes—all reputable physicians shall have access to all the hospital privileges and duties.

The author is right when he says, that "a hospital, supported by the community, is not designed for the personal gain or aggrandisement of a privileged group of physicians."

An address by Dr. S. S. Goldwater before the Annual Congress of Medical Education on "The Extension of Hospital Privileges to all Practitioners of Medicine", is published in the Journal of the A. M. A. March 28, 1925, and we urge every physician and every member of any hospital Board of Managers to acquaint themselves with its ideas and practical suggestions. We quote two important paragraphs:

"It seems, that wherever hospitals set up a privileged class of practitioners, a resentment is aroused, which will not down."

"It is the duty of physicians to seek hospital connections and it is equally the duty of those, who control hospitals, to facilitate such connections."

Every physician, licensed by the State to practice medicine, thereby acquires the moral and professional right to treat his patients in the community hospital. The State licenses the doctor to treat not only minor ailments, but serious cases as well. It is safer for the community to have the physician under some control, which the State is incapable of exercising, and which the hospital may do to some extent. The managing hospital board should keep out of the hospital the unethical, dishonest physician and should welcome every reputable physician for his own sake and the sake of the community. If a group of physicians are barred from the hospital, a certain number of patients, who require hospital care, will be treated at their homes to their disadvantage, or will be placed in the so-called private hospitals, often conducted on a purely commercial basis with poor facilities for everything—diagnosis, treatment and care.

If one accepts the principles outlined above, and we cannot see how any physician or layman can refute them, the answer to the problem can be only one. And still the author of the Journal article believes that it "admits of no categorical answer". He feels that the closed hospital is not the right thing, but is too timid to have the doors thrown wide open.



He tries to find a way out, but there is none. Only in the very small communities, where there are more than a dozen physicians, he cautiously advises to open the doors of the only hospital to all practitioners. But not in the larger communities! It may embarrass the management, it will present difficulties,—“confusion of orders, or requirements, of ideas, personalities”. Besides, “the risk of having poor or careless work done is too obvious”.

We had an opportunity to read the opinions of a great number of hospital directors and superintendents in our section of the country with regard to closed versus open hospitals. A few admitted that they can not see how a reputable physician in a community can be rightfully barred from the hospital. The majority, in the final analysis, stand up for closed hospitals and their reasons are exactly the same as our author's—it will present difficulties in management and may result in poor and careless work.

We concede the first reason. We concede that it may create difficulties in management, may present new complications, especially in the beginning. But is this a reason at all? Life is getting more and more complicated in every walk. Progress is not in avoiding difficult social situations, but in meeting them resourcefully. A right idea should not be thrown overboard because it presents difficulties of solution. As a general rule, what is right, proves to be possible.

The second reason against open hospitals is the fear of poor and careless work. We do not share this fear. Poor and careless work may be done in a closed hospital also. Poor and careless work will surely be done by those physicians “who are deprived of the helpful and stimulating contacts with an organized institution”. True, they will do this poor work not in the hospital, but in their patients' homes, and in their offices. Are we all interested in the hospital patients only? Is there nobody who has at heart the interests of the outside patients? Is it not the hospital's duty to furnish to all physicians a healthy and progressive professional environment to save them from the “danger of contracting loose habits of thought”, of “becoming careless and superficial in their clinical methods”. If we are so afraid of poor and careless work in an open hospital, where every practitioner may treat his patients, why not try to pass a law that licenses to practice medicine shall be granted only to those doctors who succeed in getting staff appointments.

The author seems to be worried about the moral responsibilities of the Board of Managers. But they, as laymen, cannot be responsible for any medical activities. We do not preach hospital work with no control at all. We do believe in control, in more control than there is at present in many closed hospitals. A competent Medical Board, the best available in the community, elected by the physicians themselves and approved by the Board of Managers, should supervise with great care all the medical work done in a hospital.

What are then the conclusions, what are the recommendations of the author? Admitting that the hospital is not designed for the personal gain of a group of physicians, that “the outside doctor, if the staff only allows

him, can give no small amount of help”, he is nevertheless ready to leave things as they are. He only advises to “soften the invidiousness and apparent unfairness of the exculsion from the hospital of a large number of the profession in the community”. Just a little courtesy, like notifying the outside physician of the operation, necropsy, discharge, or consulting him when he sends in a case. But the treatment of the case, the patient's gratitude, his fee, his future patronage, all this is the prerogative of the staff member. And the author naively believes that this “will lead to a more fellow-like feeling on the part of the practitioner toward the group of specialists who make up the hospital personnel”. He completely overlooks the fact that the outside doctor may have ambition to learn, to get experience, to be able to do good work himself; that he may have abilities and knowledge greater than those of the staff-member; that he has his problems of existence; that he cannot afford to turn over his patients to his competitors. He further overlooks the fact, that in a great many community hospitals the professional personnel are not specialists of training, but practitioners themselves in competition with the outside doctor. And we have observed that in those hospitals where the professional staff is made up of average practitioners, the doors are closed unusually tight.

In the past the closed hospital had some justification. The medical schools were of various types, some only diploma-mills. A number of graduates did not have either enough preliminary education nor sufficient medical training. But in recent years these conditions have changed. The schools are standardized. The medical graduate of the present day has received a fairly good training, is fairly well equipped, had his internship, and is capable to fit into any hospital organization.

The tendencies toward open hospitals have made considerable stride in the last few years. In fact, statistics compiled by the A. M. A. show that 80% of hospitals, newly organized in the last 5 years, are of the open type, and it is only a question of time, before the older hospitals will be compelled to open their doors. And this will bring about a closer co-operation of all practitioners of medicine; will elevate their standing in the community; will do away with the privileged group of physicians, and will eliminate the rightful complaints of a large group of practitioners.

“The Key to nearly everything that makes for efficient medical practice today is in the hands of the hospitals. Their duty is plain—they must open wide the door of opportunity, so that the entire medical profession may enter it, for the fruits of medical progress belong of right to the many, not to the few.”—(Goldwater.)

#### LETTER FROM DR. S. B. ENGLISH CONCERNING HEALTH EXAMINATIONS IN ESSEX COUNTY.

Dear Mr. Editor:

I am in receipt of your letter asking that I give some information concerning the examination work which is being done in Essex County.





Analyzing the above figures shows the undue presence of those conditions predisposing to the onslaught of tuberculosis in a large number of the examinations made. We feel that with proper education and driving home the necessity for the periodic health examination the above figures can be greatly reduced in magnitude.

### V. Follow-Up.

Replies in the follow-up work have been slow in forthcoming and our nurse is making the rounds of the factories to ascertain if our work is effective and if the employees are following the advise of our medical service. Our white cards show that the individual's doctor has been visited in the majority of cases and the Industrial Secretary has himself seen evidence of the results sought; namely, the retiring from work of a "D" employee, the changing from one job to a more satisfactory job in another "D" case, the difference in personal cleanliness, as attested by an employer, and several other conditions equally interesting.

### VI. Conclusion and Summary.

The Industrial Secretary has observed that wherever the employer has been strongly opposed and antagonistic to the introduction of health service into his factory it is he who shortly after becomes very enthusiastic and turns out to be heartily in favor and is surprised that the work hadn't been instituted before. The employees soon become our friends when once convinced that we are on the square and that we have no hidden motive in the conduct of our work. Having received the coöperation of both employer and employee to date the Industrial Secretary feels that unlimited results can be obtained in an ever increasing number of factories with the very methods in use by the League, and plans, furthermore, to carry on the work as before except for using additional methods for speeding up the efficiency of his staff and polishing off the rough edges of the service.

The following recommendations are made and it is hoped that the points will be considered at the earliest possible opportunity in order that a higher degree of efficiency may be attained in the work of the Industrial Health Service:

(1) That the Industrial Secretary meet with his committee of physicians at least once each month to discuss the problems encountered in the development of the work.

(2) That the Industrial Committee appoint a staff of four medical examiners, two male and two female, qualified to conduct health examinations in industry. The Secretary recommends at this time Dr. Eugene Parsonett for part time work. He also has several other names to present to the committee but is withholding them until he has had a chance to interview them.

(3) That a consulting physician be appointed—an expert in tuberculosis—who will meet suspicious cases of tuberculosis at the offices of the League at such time as is convenient to him and when several such cases can be brought together.

(4) That the endorsement of the lay and medical board of all hospitals in Newark be sought on the value of the periodic health examination in industry.

## Report of Industrial Health Service, July, 1925

(Prepared by Bernard S. Coleman,  
Industrial Secretary)

### I. Posters.

Health and food posters were sent during the current month to 39 manufacturing plants. In all 120 posters were distributed, making a total of 480 since the present work was begun.

### II. Lectures and Motion Pictures.

The motion pictures "Jinks" and "Working For Dear Life" were shown to approximately 800 employees at the plants of Durand Co., Manufacturing Jewelers; Whitehead & Hoag, Novelty Manufacturers; Chas. D. DeBevoise Co., Brassiere Manufacturers; and the Lauter Piano Co. In each case the company's time was given for the showing of the pictures and we were thus spared the embarrassment of depriving the employees of part of their lunch period and subsequent diminished attendance. At the plant of the DeBevoise Co. "Jinks" had been shown before, but a letter from them indicates that the employees were more interested than at the former showing and that they viewed the picture more critically. A health talk accompanied the pictures and it has been found expedient to include a general discussion of the personal hygiene of the individual in relation to his job and to industry. Whereas it has formerly required 30 minutes to complete the showing and talk, we are now taking 45 minutes for the work, and I am pleased to report that the time has been willingly given both by the employers and the employees.

### III. Examinations.

Health examinations were conducted in the plants of the Seeley Tube & Box Co., A. W. Faber Co., Durand Co., and Whitehead & Hoag, 218 employees were examined by our Medical Examiners, Drs. Hauck and Orloff, assisted by Miss Smith, R.N., Miss Nelson, R. N. and Miss Weston, stenographer. This is an increase of 70 examinations over the preceding month.

Impromptu clinics were established in 3 of the plants, the fourth having a permanent dispensary. The factory foremen assisted in every possible way and we had, in fact, the coöperation of the factory executives in each instance.

The following table shows the total number and incidence of defects found among those employees who have submitted to the examination since the Industrial Health Service was established.

	No. of Examinees	Per Cent
Total Number Examined.....	365	
No Defects.....	21	5.8
Minor Defects.....	235	64.3
Advanced Minor Defects.....	67	18.4
Major Defects or Numerous Advanced Minor.....	42	11.5
	No. Defects	Per Examinees Cent
Teeth and Gums .....	140	38.3
Underweight .....	137	37.5
*Nutrition .....	111	30.5
Throat and Tonsils .....	66	18.1



Blood Pressure .....	58	15.9
Overweight .....	54	14.8
Anemia .....	53	14.5
Nose .....	48	13.2
Eyes .....	33	9.1
Ears .....	33	9.1
Lungs .....	28	7.7
Skin .....	26	7.1
Heart .....	26	7.1
Posture .....	21	5.8
Neck .....	18	4.9
Urine .....	17	4.7
Hernia .....	16	4.4
Deformities .....	7	1.9

\*Nutrition figures do not include total number of underweight and overweight cases.

#### IV. Follow-Up Work.

Two cases of Pulmonary Tuberculosis have been disclosed and reported. In one case arrangements are being made by the employer to have the employee sent to a sanatorium and to adopt suitable plans for providing for the dependents. The other case will be followed up within a week or two—as soon as the individual will have returned from his vacation.

The follow-up work is proceeding as planned and the results are manifesting themselves in visits to the doctor and dentist by the examinees. We are not mailing out the white follow-up cards, but the nurse is personally interviewing the employees and recording the answers as given. This will give us more complete and accurate information. Letters containing the results of the examinations have been sent to the private physicians.

#### V. Recommendations.

Miss Mary M. Richeson, R.N., is recommended for the position of Industrial Nurse for the Industrial Health Service. A full time nurse is required, for there is sufficient factory and follow-up work to keep one fully occupied. It is further suggested that an additional female physician be placed on our service.

#### Cost\* of Conducting Examinations.

May 15-Aug. 1, 1925.

Physicians' Fees .....	\$777.50
Nurse's Salary .....	124.25
Stenographer's Salary .....	125.00
Moving Pictures .....	60.00

\$1086.75

\*Exclusive of salary of Industrial Secretary.

#### Discouragement.

The neighbor of a man noted for his extreme thrift saw him on a week day dressed in his Sunday clothes.

"What's up, Jim?" he called out. "Why the glad rags?"

"Haven't you heard the news?"

"News! What news?"

"Triplets!"

"Oh, so that accounts for—" began the neighbor, when the frugal one interrupted him:

"Yes, that accounts for my wearing these clothes. What in thunder's the use of trying to be economical!—" Boston Transcript.

## County Society Reports.

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The monthly meeting of the Atlantic County Medical Society was held on the evening of October 9, at the Hotel Chalfonte with Dr. D. Ward Scanlan presiding. Due to the absence of Dr. W. Blair Stewart, chairman of the committee of Sanitation and Health, a letter from the chairman was read by the president. This communication embodied a discussion relative to the sale of a water shed, which matter was discussed with the Civil Engineers. This body of land comprises 335 acres and it is the purpose of the City Commissioners to take into consideration the selling of this tract of land to an organization which purposes to erect an automobile race track and an aëro-drome. The problem of a sanitary menace to the water supply of Atlantic City being of great importance prompted the presentation of this subject before the County Medical Society. This problem was discussed by Dr. H. B. Costill, Director of Public Health of New Jersey; Dr. Edgar Darnall, who is head of the mosquito commission of Atlantic County; Dr. Royer, formerly of the State Board of Health of Pennsylvania, and Dr. Philip Marvel, Sr., the last named speaker presenting a motion that was duly seconded as follows. That the Atlantic County Medical Society does not concur in the sale of any part of the water shed recommended by the City Commissioners, as there is grave possibility of contaminating the Atlantic City Water Supply from human and animal sources. Mr. Leeds, president of the Chamber of Commerce, also took part in the deliberations upon the water supply to Atlantic City.

The above resolution was adopted

The question of offering the "Doctors Title Bill" before the State Legislature was deferred for final action, as the consensus of opinion held that this bill is of little practical benefit to the members. The following applications for membership were presented by the secretary: Doctors Harry Subin, J. T. White, W. Fox, D. Rappaport, of Atlantic City, and L. Mohest, of Pleasantville. These nominations were referred to Dr. Walt P. Conaway, chairman of the Board of Censors.

The Scientific Program was then opened by Dr. H. Costill, who presented the activities of the State Board of Health in a most interesting manner. Among the interesting facts outlined was the vast amount of work performed by the State Laboratory. In addition to its broad activities, are vast numbers of specimen examinations as follows: Diphtheria examinations, 18,000 annually, this number only including the original specimens; 5000 examinations of milk, food, drugs and alcoholic liquors; milk is tested for adulteration and contamination in approximately 8000 dairies in the state and this does not include the certified dairies; Wassermann examinations numbered 16,000; examinations for Tubercle Bacilli 65000; miscellaneous tests for the Gönococci, Typhoid, Anthrax, etc., totaled 9500. Many examinations of dogs are made for Rabies. During the year a total of 50,000 examinations were made of



bacteriologic and serologic specimens. A comprehensive survey of the oyster industry, excellently illustrated, was presented. This industry is kept under scrupulous observation and is considered the cleanest in the country, due to the constant vigil of the Department of Health. Further activities comprised the frequent inspection of over 200 abattoirs and, in addition, the milk herds are examined for T. B.

Ice cream plants to the number of 500 are frequently inspected; so are wells situated on dairy farms, and 300 sewage disposal plants are supervised.

Another active department is the Child Welfare branch, including prenatal and postnatal clinics, which clinics are found over the entire state of New Jersey. In addition there is a bureau for the supervision of Tuberculosis which embodies a follow up system into the home.

Noteworthy departments are: The diagnostic and venereal disease clinics; vital statistics, into which records are written the history of the people of New Jersey, and it was with pardonable pride that Dr. Costill stated that this system is of such excellence that it is copied by other states. During the last fiscal year there were entered into the records 160,000 births, marriages and deaths. During that same period of time over 100,000 communicable diseases were reported. This extensive survey of Dr. Costill's activities was discussed by Drs. Carl Surran and Robert Kilduffe.

The next part of the program was presented by Dr. Wm. H. Schmidt, of Philadelphia. His subject was: "Modern Therapy in Malignant Disease with Indications for Special Methods." In a brief yet comprehensive review, Dr. Schmidt presented statistics which showed an increase of cancer, and stressed the importance of prompt, early and efficient treatment and also the education of the laity and medical profession. It is most important to eradicate every possible source of irritation such as warts, moles, ulcers, leukoplakia, decayed teeth, badly fitting dentures, tobacco, etc. Before treatment a thorough examination should be instituted.

Dr. Schmidt presented 4 methods of treatment (1) Surgery; (2) Radium; (3) X-ray; (4) Electrothermic. Indications may point to combined treatment. Radium is more efficient in the embryonic type and is the method of choice in cancer of the cervix, lymph tissue tumors, cancer close to the blood-vessel and nerves, and also the bladder. Radium is also indicated for the purpose of conserving tissue, as in recurrent carcinoma of the breast, occasioned by large destruction of the tissue. X-ray is indicated in a wide spread tumor such as sarcoma. Electrothermic method is best used in basal cell epithelioma of the face, and in cancer of the lip and mouth is superior to all other methods. Combined methods may be used in cancer of the mouth and lower lip; the uterus, rectum and prostate, one method assisting the other in its beneficial effects.

In the treatment of cancer, Dr. Schmidt held that better results are obtained by the operator being a master of procedure, fully understanding the variability in results of

treatment. Among other qualifications, the operator must possess a thorough knowledge of edge of treatment by all methods; and, a complete understanding as to the application of the combined method of treatment. The slides presented, illustrated different types of tumors and the excellent response shown by proper treatment. Dr. Schmidt's paper was discussed by Dr. Robert A. Kilduffe, director of the hospital laboratories and by Dr. Costill.

## BERGEN COUNTY.

Flora Adams, M.D., Reporter.

The regular monthly meeting of the Bergen County Medical Society was held Tuesday evening, October 13, at the Hackensack Hospital, the president, Dr. Trossbach in the chair. No scientific program was arranged for the evening, the meeting being given over to discussion of the revised Constitution and By-Laws of the society. The State Journal Editor, Dr. Reik, was present and asked for an expression of opinion as to the advisability of continued efforts on the part of the Welfare Committee to secure the passage of the "Doctor's Title" Bill. On motion by Dr. Bell, the society expressed itself as favoring continued efforts by the Welfare Committee in this direction.

Dr. Farmer was admitted to membership in the society.

The president announced November 5 as the date for the annual banquet and the Swiss Chalet as the place.

## BURLINGTON COUNTY.

R. I. Downs, M.D., Reporter.

The ninety-sixth annual meeting of the Burlington County Medical Society, held in St. Mary's Guild House in Burlington, N. J., on Wednesday, October 14, 1925, was a great success, from the standpoint of attendance, extensive business, and comprehensive program. The number of members and guests totalled 33. The visitors who were presented to the assembly were: Dr. Henry O. Reik, of Atlantic City, Editor of the Journal of the Medical Society of N. J.; Dr. Hannah M. Stone, of New York City, Clinical Director of the American Birth Control League; Dr. Henry Matez, of Pemberton, N. J.; Dr. Norah, resident physician at the Burlington County Hospital in Mount Holly; Mr. E. R. Meves, of Camden, N. J., State Organizer of the American Birth Control League; Dr. J. B. Morrison, of Newark, N. J., Recording Secretary of the Medical Society of New Jersey.

The following doctors made application for membership in the society: Paul B. Reisinger, Roebling, N. J.; Russell D. Geary, Delanco, N. J.; Parry M. Scott, Beverly, N. J.; Jacob M. Davis, Burlington, N. J.; G. E. McDonnel, Mt. Holly, N. J.; Henry Matez, Pemberton, N. J.

Dr. E. R. Mulford resigned as permanent delegate to the State Society, because of his having been elected third vice-president of the State Society.

The following officers, recommended by the

Nominating Committee, were elected for the ensuing year: President: R. I. Downs. Vice-President: Benj. K. Brick. Secretary and Treasurer: George T. Tracey. Reporter: R. I. Downs. Censor: Harry L. Rogers. Delegates to State Society: Edgar Haines and Harry W. Bauer. Nominating Committee State Society: George T. Tracey. Nominee for Permanent Delegate to State Society, in place of E. R. Mulford, resigned: Emlen P. Darlington. Welfare Committee of State Society: Daniel F. Remer. Delegates to Camden County Medical Society: Andrew P. Lore and Howard C. Curtis. Delegates to Atlantic County Medical Society: A. L. Gordon and J. E. Dubell. Delegates to Cape May County Medical Society: Alex Marcy, Jr., and Joseph Stokes. Delegates to Gloucester County Medical Society: Marcus W. Newcomb and Emlen P. Darlington. Delegates to Salem County Medical Society: Nathan Thorne and D. B. Ulmer. Chairman Section: Practice of Medicine: Richard Anderson. Surgery: Joseph Kuder. Obstetrics and Pediatrics: S. Emlen Stokes.

The Auditing Committee, consisting of Drs. Anderson and Kuder, reported that they had examined the Treasurer's books and found them correct.

Dr. Richard Anderson, of Burlington, described an interesting and rare case of Syphilis of the Lung. A brief record of it was as follows: Onset with symptoms of pneumonia—pseudo-crisis—delayed resolution—appearance of pulmonary tuberculosis—prognosis grave—Wassermann plus 4—x-rays showing gumma of lung—recovery rapid on administration of mercury and iodides.

Dr. Newcomb suggested that the Society should devote one meeting annually to a social gathering for members and their families, in addition to the regular sessions; the last social event was held in 1907. The Society voted in favor of this, and all present promised to attend. Drs. Newcomb, Mulford and Tracey were appointed a committee on arrangements.

Dr. Morrison made a few remarks in his usual instructive manner. He was pleased to note so many new applications for membership, as he wished to see all doctors become members of the medical societies rather than have 30% of them outside as is the condition in the state at present. He explained that the increased State Society dues, now \$10. per annum was partly due to the decreased value of the dollar and partly to the increased work the Society is doing. He asked for support of the Doctor's Title Bill and received it by the unanimous vote of the Society. He spoke of the postgraduate courses now available and wished all of us would make use of the opportunity offered. He explained that the present group insurance, now sponsored by the State Society is the best obtainable and warrants our support.

The program following the business meeting was varied and enjoyable. Dr. Stone's fine lecture on "The Technic of Contraception" is to be published shortly, as will be also the President's Annual Address, a practical and original paper on "Medical Ethics".

Dr. Reik spoke in explanation of "Periodic Health Examinations", recommended that the family physician make special preparation to

do this work for his own patients, and stated that his office has a supply of record cards and instructions to be supplied to members of the profession at cost.

At the conclusion of the program an excellent dinner was served.

### CAMDEN COUNTY.

Grafton E. Day, M.D., Reporter.

The annual meeting of the Camden County Medical Society was held at the City Dispensary, on Tuesday, Oct. 13, with Dr. C. H. Jennings, of Merchantville, presiding. Reports were read by the Historian, Dr. Strock; by the Treasurer, Dr. J. E. L. Van Sciver; and by the Chairman of the Welfare Committee, Dr. A. H. Lippincott. After a discussion of the latter report, the Society voted against the proposed change in the Medical Practice Act, known as the "Doctor's Title" Bill, believing that this title is amply protected in the present law.

In his Presidential Address, Dr. Jennings told us of the importance of an organized profession and appealed for larger attendance at medical society meetings.

Dr. Alexander MacAlister, Secretary of the State Board of Medical Examiners, reported that conferences are under way between the New Jersey and Pennsylvania State Boards to iron out the misunderstandings existing over reciprocity in medical licensure.

Dr. Kaufman read a paper on "Pernicious Anemia Following Labor."

The following officers were unanimously elected: President: A. M. Elwell, Vice-President: Alfred Cramer, Jr. Secretary: Thomas B. Lee. Treasurer: J. E. L. Van Sciver. Historian: Daniel Strock. Reporter: Grafton E. Day.

At the conclusion of the meeting, dinner was served to the members and guests.

### Camden City Medical Society.

Henry B. Decker, M.D., Secretary.

The regular monthly meeting of the society was held on the sixth of October. Dr. Edward Weiss, of Philadelphia, spoke on "Congenital Heart Disease". He described first the three types which usually are unaccompanied by cyanosis, patulous foramen ovale, interventricular septum defects, and persistent ductus arteriosus. The results of these defects, under ordinary conditions, are compensated by more vigorous cardiac action. The diagnosis is made by finding a murmur and thrill in the second intercostal space to the left of the sternum; enlargement of the pulmonary artery; and enlargement of the right side of the heart. With the exception of the ductus arteriosus type, in which bacterial infection frequently occurs, these effects are harmless, so long as they are properly compensated.

Congenital heart disease which is accompanied by cyanosis is due to a different sort of defect. Usually one finds a stenotic pulmonary artery, a defect in the auriculoventricular septum, and an overriding aorta which receives blood from both ventricles. A three-chambered or a two-chambered heart is rarely found.

Dr. Lavinia Clement, of Haddonfield, was elected to membership.



**CAPE MAY COUNTY.**

Eugene Way, M.D., Reporter.

The forty-second annual meeting of the Cape May County Medical Society was held in the assembly room of the Woodbine Colony for Feeble-Minded Males Tuesday, Oct. 20.

President Gandy presided and a welcome address was delivered by J. A. Tinsley, superintendent of the colony, followed by an address by Miss Dorothy M. Bassett, psychologist, assisted by Miss Lucille D. Moore, clinic assistant, on "The Feeble Minded". Miss Bassett was a pleasing speaker and her address was greatly appreciated by the Society.

Discussion was opened by Prof. E. R. Johnstone, director of the Vineland Training School, who complimented Miss Bassett on her remarks and the work she was doing in the various institutions of the state. He also spoke on the duty of the state toward its helpless and dependent wards.

Dr. Robert G. Stone, assistant medical director of the State Hospital for Insane at Trenton, gave an address on "The Insane", and dwelt on the difference between the feeble-minded and insane.

Discussion was opened by Dr. W. P. Glendon, of Bridgeton, and participated in by several other physicians.

Officers for the year 1926 were elected as follows: President: Dr. George F. Dandois. Vice-President: Dr. Herschel Pettit. Secretary and reporter: Dr. Eugene Way. Treasurer: Dr. H. H. Tomlinson. Permanent delegate to the State Society: Dr. Clarence W. Way. Annual delegate: Dr. Frank R. Hughes. Member of State Nominating Committee: Dr. C. W. Way. Censor: Dr. W. P. Haines. Committee on public health, legislation and welfare: Drs. J. Way, Millard Cryder and W. A. Loke.

The meeting was largely attended and was undoubtedly the best ever held in the history of the Society. Prominent educators and physicians from all parts of the state were present.

President Lucius F. Donohoe, president of the State Medical Society, appointed Dr. Eugene Way a member of the Welfare Committee of the State Society.

Dr. Lucius F. Donohoe, president of the State Medical Society; Dr. J. Bennett Morrison, secretary of the State Medical Society; Dr. Henry O. Reik, executive secretary and editor of the Journal of the State Medical Society; Henry B. Coles, president of the Board of Managers of the colony, and others gave interesting addresses.

**CUMBERLAND COUNTY.**

Elton S. Corson, M.D., Reporter.

The annual meeting of the Cumberland County Society was held at the Hotel Commercial, Bridgeton, Tuesday, October 6, Dr. E. C. Lyon presiding. Dr. George Thomas, of Vineland, was elected to membership. The names of Drs. Vincenzo Giacalone, Kurt and Bellm were proposed for membership.

Dr. William E. Caldwell, of Sloane Maternity Hospital, New York City, addressed the Society on "Pathologic Findings in Still-Birth and

Neonatal Deaths". He said that there had been marked progress in obstetrics in the last 10 years and that the additional cost has been worth while in the saving of life and life time infirmities. Observations made in Holland, England and America have shown that what was formerly regarded as asphyxia in the newborn is really in most cases due to a brain lesion, especially to rupture of the tentorium. Next in importance he considered infection of the amniotic fluid, which the baby inspires with the result of producing a pneumonitis. Breech presentations caused a high mortality; 30% given by some observers, 20% by others, and 12% in the Sloane Hospital. Moving pictures were used by Dr. Caldwell to demonstrate the technic used in obstetric work. High forceps applications are becoming less frequent; it is safer in many cases to perform version. The use of Borton's forceps was illustrated; 38 applications have been made in the Sloane Hospital and the instrument is giving satisfaction.

Dr. Lydia Stewart Cogill, Professor of Obstetrics, Women's Medical College, Philadelphia, delivered an address on "Abnormalities of the New-born."

The following officers were elected for the new year: President: H. S. Brannin, Millville. Vice-President: H. H. Wilson, Bridgeton. Secretary: H. Garrett Miller, Millville. Treasurer: H. H. Wilson, Bridgeton. Reporter: E. S. Corson, Bridgeton.

**ESSEX COUNTY.**

Alfred Stahl, M.D., F.A.C.S., Reporter.

The 110th annual meeting of the Essex County Medical Society was held Tuesday evening, October 6, 1925, at The Academy of Medicine, Lincoln Park, Newark. A goodly attendance, numbering 260, was present.

The reports of the various standing committees and of the officers of the Society were received and placed on file. The Treasurer presented a detailed report of the finances of the society, showing the treasury to be in very good condition. On recommendation of the President and the Treasurer, the Society fixed the dues at \$18.00 for the ensuing year.

Dr. Clarence R. O'Crowely, the retiring president, made the subject of Periodic Health Examination the basis of his Presidential Address. He pointed out the desirability of establishing a clinic at the Academy where members of the County Society would submit to health examination. This would act as a stimulus to the lay public to become interested.

Dr. Elmer G. Wherry was elected to succeed Dr. O'Crowley as President. Dr. Sanford J. Ferris was elected to the Vice-Presidency to succeed Dr. Wherry. Dr. Frank W. Pinneo, Dr. Robert H. Rogers and Dr. Alfred Stahl were reelected Secretary, Treasurer and Reporter respectively.

Drs. T. W. Harvey and Max Danzis, whose terms as Councilors expired, were reelected. Drs. F. R. Haussling and David R. Kraker were elected to succeed Drs. E. S. Murray and C. A. Rosewater, whose terms expired. As Delegates to the State Medical Society, when



vacancies occur, Drs. Harrison S. Martland, A. W. Bingham and Edgar A. Ill were selected.

The following named were elected to membership:

M. Weinstock Bergman, 680 Clinton Ave., Newark; Louis Bleier, 118 Ferry St., Newark; Willis W. Creswell, 48 Warren St., Newark; Simeon Daron, 61 West St., Newark; Harry Halprin, 8 Wasturn Pl., Caldwell; S. Bernard Kaplan, 246 Clinton Pl., Newark; Elwood H. MacPherson, 12 Rawley Pl., Millburn; Wm. M. Rathgeber, 249 Roseville Av., Newark; M. Mitchell Skupnik, 405 Hawthorne Av., Newark; Edward H. Willan, 157 Washington Ave., Arlington.

#### Academy of Medicine, Newark.

Alfred Stahl, M.D., Reporter.

The stated meeting of the Academy of Medicine of Northern New Jersey, was held October 21, 1925. After the minutes of the previous meeting were read and other routine business disposed of, the evening was given over to Thomas McCrea, M.D., Professor of Medicine, Jefferson Medical College. The title of his paper was "Rheumatism".

The word "Rheumatism" should be dropped from our vocabulary said Dr. McCrea, because of its ambiguous meanings. It would be far better and more correct to designate a certain case as being rheumatic fever, acute rheumatic arthritis, chronic rheumatic arthritis, tubercular arthritis, etc. Unfortunately the arthritis has for a long time been considered the most constant and outstanding symptom of rheumatic fever. Myocarditis and dilation of the heart is present in 100% of cases. Young children rarely present an arthritis in rheumatic fever, but always present cardiac involvement. The early detection of rheumatic fever in childhood and putting them at rest in bed, is the best safeguard against permanently damaged hearts. Our chief desideratum in the treatment of this disease is to bring the patient through his attack, with the least possible damage to his heart. Cardiac complications rarely occur while the patient is at rest in bed.

Rheumatic fever is most likely caused by a specific microscopic organism, probably of the streptococci type. The tonsil is the portal of entry in the large majority of cases. If all diseased tonsils could be removed from children, a decided decrease in the number of permanently crippled hearts would be effected.

Rheumatic fever in children is manifested by fever, malaise, with or without slight stiffness of one or more joints. The temperature is rarely above 100 or 101°. In severe cases subcutaneous tendinous nodules can be made out in back of the elbow, over the maleolus and over the spinous processes of the vertebrae.

Removal of the tonsils by a competent man is the best preventative. Large doses of salicylates are best in the treatment of the attack; 180 grains in 24 hours is an average dose for a child.

A rising vote of thanks for his interesting paper was extended to Dr. McCrea by the Academy.

The Eye, Ear, Nose and Throat Section of the Academy of Medicine of Northern New Jersey, held its regular monthly meeting Monday, October 12, Dr. William O'G. Quimby presiding.

The paper of the evening "Daily Problems, Ear, Nose and Throat Practice", was read by Dr. H. C. Barkhorn, of Newark. The doctor covered the field in a remarkably efficient manner, stressing the necessity of a thorough examination of every patient, and of recording the findings in a systemic way, easily accessible for reference. The paper was discussed by Drs. Eagleton, Keim and Pyle.

#### GLOUCESTER COUNTY.

Henry B. Diverty, M.D., Reporter.

The Gloucester County Medical Society met October 15, at the Woodbury Country Club and had a very interesting session.

The speakers were Dr. E. J. Klopp, of Philadelphia, whose subject was "Acute Abdominal Diseases", and Dr. Henry O. Reik, of Atlantic City, Editor of the State Medical Journal, whose subject was "Periodic Health Examinations".

The guests of the Society were Drs. F. W. Shaffer, Irving Dibert and Emma Richardson, of Camden. Members present: Drs. Campbell, David Brewer, Underwood, Carpenter, Nelson and Diverty, of Woodbury; Ashcraft, of Mullica Hill; Hunter and Hollinshead, of Westville; Buzby, of Swedsboro; Wood, of Paulsboro; Knight and Lummis, of Pitman; Duffield, of Glassboro, and Stout, of Wenonah.

#### HUDSON COUNTY.

M. I. Marshak, M.D., Reporter.

The Hudson County Medical Society held its regular meeting at the Jersey City Hospital on October 6, 1925, Dr. J. F. Londrigan presiding.

The Executive Committee presented the following recommendations, which were adopted: (1) In order to meet the increased assessment of the State Society, the dues of the Hudson County Society be raised to \$15.00 per year. (2) That the Committee on Health Examinations receive the whole-hearted support of the membership of this Society, and that they forthwith answer the questionnaire sent to each member as to whether or not they desire such an examination. (3) That the Secretary write to the State Board of Medical Examiners, bringing to their attention the number of illegitimate practitioners in the county. (4) That the Committee on Scientific Work bring in a report of the recent research on the cancer germ,—this report to be ready for the November meeting.

Dr. G. K. Dickinson spoke on the value of the Gorgas Memorial and asked that the Society endorse this movement; this was accordingly done. Dr. J. F. Londrigan spoke on the "Doctors' Title Bill" and asked that the Society go on record as supporting the re-introduction of this measure at the next meeting of the Legislature. After a considerable discussion the Society voted that they did not favor this bill.

Dr. James Alexander Miller, Professor of Clinical Medicine at Columbia University, gave an informal talk on "Modern Methods of Surgical Treatment of Pulmonary Tuberculosis." He stated that all methods were based on the principle of placing the diseased lung at rest. This was first carried out by induced pneumothorax which he considered the most outstanding contribution to the treatment of pulmonary tuberculosis, and that almost invariably this procedure should be tried before considering surgery. Prolonged observation with especial reference to the x-ray findings, both before and after operation, are most important. In the selection of cases, the appraisal of the general condition of the patient and of the condition of the opposite lung, is the vital factor. "Thoracoplasty" is a process of immobilizing a lung by a one or more stage operation with rib resection. The operative risk is as yet high, but as time goes on, the technic is being developed and the risk is becoming less. The results are good in about 50% of the cases so treated. Considering the fact that the cases selected have a very poor prognosis as to life, a few months or a year at most, the results are not bad. As a rule the patients, when the risk is explained to them, are only too glad to accept the operation. Speed of operation is very important in order to cut down the shock. The anesthetic first used was local, now gas and oxygen combined with local is the anesthetic of choice. The after-care consists of a prolonged period of sanatorium régime.

Drs. Dickinson. Jaffin, Pollak, Bartone, Curtis and Marshak took part in the discussion which was closed by Dr. Miller. They brought out the facts that this operative procedure is becoming more and more important in the treatment of certain types of pulmonary tuberculosis; that team work between an internist who knows tuberculosis, a roentgenologist who has a wide experience with chest plates, and an adept surgeon, are essential; that there should be no hurry in the selection of the cases, and that it will give a great many hopeless cases a chance.

### HUNTERDON COUNTY.

Morris H. Leaver, M.D., Reporter.

The annual meeting of the Medical Society of Hunterdon County was called to order by the President, Dr. A. H. Coleman, of Clinton, in the Court room at Flemington, at 11 a. m., October 27, 1925.

The secretary stated that the Society at present numbered 28 members, of which the following answered the roll call: E. W. Closson, A. H. Coleman, S. B. English, B. S. Sherman, H. M. Harmon, M. H. Leaver, L. T. Salmon, G. B. Tompkins and L. C. Williams.

The visitors were, Henry O. Reik, of Atlantic City, Editor of the Journal of the Medical Society of New Jersey, and Edward S. Hawke, of Trenton.

Dr. Geo. N. Best, of Rosemont, was reported ill and unable to attend.

Reports of Sections: Dr. G. B. Tompkins, chairman of the Section of Roentgenology, reported cases and treatment of Colles' fracture, which was discussed by Dr. L. T. Salmon.

Dr. S. B. English reported cases of pulmon-

ary tuberculosis, especially one case of pleuro-bronchial fistula and the treatment of same by artificial pneumothorax.

At this time a discussion was provoked between Dr. English and Dr. Williams upon the comparative merits of the mercury quartz and the carbon arc lamps in the treatment of fistula, etc., Dr. English speaking from his experience with the mercury quartz light and Dr. Williams from experience with the carbon arc.

The secretary made a statement as to the advantages of the Group Insurance against claims for malpractice, which was amplified by Dr. Reik.

Dr. Reik made a statement as to a proposed legislative bill restricting the use of the term "Doctor" to Medical Practitioners, dentists and Veterinarians. Upon motion this Society voted not to support this bill.

The following officers were elected:

Delegate to the State Society: A. H. Coleman, of Clinton. Alternate: L. T. Salmon, of Lambertville.

President: G. B. Tompkins, of Flemington. First Vice-President: L. C. Williams, of Lambertville. Second Vice-President: Geo. Henry, of Flemington. Treasurer: E. W. Closson, of Lambertville. Secretary: L. T. Salmon, of Lambertville. Reporter: L. T. Salmon, of Lambertville.

The Society voted that the reporter should, if necessary, employ a stenographer to get out the reports of the Society meetings for the Journal.

An amendment in writing, to Chapter II, Sec. 1, of the By-Laws of this Society was offered by Dr. Fuhrman, that "The stated meetings of this Society shall be held on the fourth Tuesday of January, April, July and October." This amendment was accepted by the Society and ordered voted upon at the next regular meeting in April, 1926.

Dr. Reik gave a talk on "Periodic Health Examinations", and stated that he was broadcasting through WHAR, Atlantic City, a ten-minute talk on health problems, every Thursday evening at 7:30, which talks were being published in the papers of the state.

Dr. Hawke reported a case of postpartum hemorrhage, occurring 3 weeks after delivery, in a woman with jaundice. He also reported a case in his service at Mercer Hospital in Trenton of a student beginning with a sore throat, developing pneumonia and pyothorax, perirenal abscess, then pneumonia on the other side, with ultimate good recovery.

The Society adjourned at 1 p. m. to partake of a very good dinner furnished by mine host of the Union Hotel.

### MERCER COUNTY.

A. Dunbar Hutchinson, M.D., Reporter.

The Mercer County Society met October 14. Dr. D. L. Haggerty presiding.

The receipt of an invitation to attend the meeting of the Burlington County Society is hereby acknowledged. Unfortunately, this meeting fell on the same date as our own, and as the program promised to be one of great interest, our members were compelled to forego the pleasure of attending Burlington's meeting.



Dr. John F. Hagerty, of Newark, addressed the Society on the subject of "Goiter", giving a concise resumé of the history of goiter with statistical reports on the prevalence of this disease in several counties.

The etiology, clinical and physical symptoms, with medical and surgical treatment of the disease were discussed.

Great interest was displayed in the spirited discussion which followed the address.

Dr. Hagerty was accorded a sincere vote of appreciation for his interesting discourse.

The motion was carried that the Society favors the reintroducing of the "Doctors' Title" Bill.

An amendment to the By-Laws, increasing the annual dues to \$15 was introduced.

Several applications for membership were received.

### MORRIS COUNTY.

Marcus A. Curry, M.D., Reporter.

The September meeting of the Morris County Medical Society was held on the evening of Tuesday the twenty-ninth, having been postponed from the second Tuesday of the month because of several vacation absences. The meeting was held at the New Jersey State Hospital at Greystone Park, the facilities of the institution having been made available through the courtesy of Superintendent Dr. Marcus A. Curry.

President McMurtrie presided over a gathering of about 30 members and guests, the latter including Dr. J. Meigh, of Bernardsville, and members of the State Hospital staff; Drs. Washburn, Pollock, Holdcroft, Christian, Roche and Hubert.

Included in the routine business transacted was the reading and consideration of a communication from Secretary Morrison of the State Medical Society advising that the annual fee per member of the County Society to be paid to the State Society would be \$10 beginning with the year 1926. As the county society dues at present are \$12 a year per member it was apparent that the balance of \$2 per member would be insufficient for the county society to carry on. Appropriate action was taken toward increasing the county membership dues to \$15; a resolution to that effect being offered by Dr. Glazebrook and given first reading.

Dr. Glazebrook, of the Executive Committee, reported on the present method of selecting delegates to the State Society in alphabetic order, explaining why this method did not tend to advance satisfactorily the aims and interests of the Society. Dr. Curry supplemented Dr. Glazebrook's recommendations for a change in the method of selecting delegates. A resolution was offered by Dr. Costello providing for an amendment to the By-Laws so that delegates and alternates would be elected in the same manner as officers of the Society, and was given first reading.

One proposal for new membership was received and referred to the Committee on Membership.

In harmony with the established custom of retiring Presidents, Dr. McMurtrie delivered an address for which he chose as his subject

"Medical Ethics" and which stressed admonitions highly worthy of indelible inscription on the tablets of memory.

This being the annual meeting, election of officers and delegates for the ensuing year was held and resulted as follows:

President: Francis H. Glazebrook, Morristown. Vice-President: Clarence A. Plume, Succasunna. Secretary: George H. Lathrope, Morristown. Treasurer: F. Grendon Reed, Morristown. Reporter: Marcus A. Curry, Geystone Park.

Annual Delegates: Drs. Coultas, Costello and Curry.

Alternates: Drs. Carberry, Degrott and Emory.

The retirement of Dr. Kice from the office of Secretary was effected with much hesitation and reluctance and only in deference to the expressed wish of that highly competent and faithful official who for 25 years has served the Society so exemplarily, missing but 2 meetings in a quarter century of secretarial service. Many were the deserved encomiums bestowed on Dr. Kice who carries into his retirement as secretary the appellation "Magna cum Laude".

Newly-elected President Glazebrook was invited to take the chair and assumed the duties of his office.

Dr. Ackerman presented the question of Group Insurance for the members, which was very favorably received and deemed to be well worthy of consideration. Action was taken that the President appoint a committee to look into the proposition, pursuant to which the following committee was duly appointed: Drs. Ackerman, Curry and Plume.

Dr. Meigh, of Bernardsville, extended a cordial invitation to our members to attend the annual meeting of the Somerset County Society at Somerville, and also a meeting of the Medical Club at the Canoe Brook Club where there will be moving pictures of Ulcers of the Stomach. President Glazebrook voiced the sentiment of the members toward the courtesy and friendliness exhibited by Dr. Meigh and gave assurance that the invitations would be accepted by representation.

Dr. McMahon spoke on the friendly attitude of larger county societies toward Morris County and stressed the importance of electing delegates intent upon accomplishing the aims of our society in coöperation with other societies.

Superintendent Curry, of the State Hospital, addressed the meeting, stating that he appreciated very much having the members of the Society come to the institution for their meetings; that he liked to have the various physicians of the county come to the institution and to know something of the institution and something about the men working at the institution; and should like to have them come for consultations; that there are staff meetings held for the presentation and examination of patients on every week day except Wednesday, from 11 to 1 o'clock, to which he should be glad to have the members come at any time, especially where any of the physicians have committed the patient, and wish to follow up the patient; that Dr. Meigh, of Bernardsville, had attended these meetings where



he has been one of the committing physicians and followed the patient through at this hospital; he thought this would be a fine thing for the county physicians to do. We are building at present a reception hospital for 250 patients, which we feel is a model; every patient coming to the institution will first go into that building and the present Clinic Building will be turned into a hospital and treatment building, and every patient in this building will be a hospital case, running from 300 to 400 patients; we think we have on our staff a group of excellent men and they will be glad to cooperate with the physicians in the community.

Continuing, Superintendent Curry said that on August 17, 1926, this institution shall have been in operation for 50 years; that if nothing happens to prevent, there are contemplated dedicatory exercises for the new Reception Hospital Building and co-incidentally a semi-centennial celebration of the opening of the institution; and expressing a cordial desire that the members of the Society be present for the dual celebration.

Superintendent Curry closed with an invitation to the members and guests to partake of refreshments which Warden Bowen had prepared.

President Glazebrook's response was that it is always a pleasure to come to this annual meeting; we always get such a warm reception and such pleasant things to eat. "I know we love to come back every year; I don't believe there is much doubt on the part of the members of the Society of what is being done at the institution; we are not all intimately associated with the institution and some of us hope we never will be (laughter); but we are intimately associated with its superintendent and have every confidence in the world that everything is done that ought to be done."

#### PASSAIC COUNTY.

Louis G. Shapiro, M.D., Secretary.

The annual meeting of the Passaic County Medical Society was held on Thursday evening, October 8, at the Health Center Building, Paterson. Dr. Dingman called the meeting to order at 9 o'clock; 36 members were present.

Dr. Jacob Roemer read a paper on "The Roentgenologic Diagnosis of Gall-Bladder Disease", illustrated with lantern slides. Drs. Wilkinson, Spickers, Dingman and Mendelsohn discussed the paper.

The following officers were elected for the year 1926:

President: Charles R. Mitchell. First Vice-President: Orville R. Hagen. Second Vice-President: G. Edward Tuers. Secretary: Donald B. Low. Treasurer: Louis J. Bohl. Member of the State Nominating Committee: Henry H. Lucas. For Member of the Board of Censors: Thomas A. Dingman.

The following members were elected as Annual Delegates to the next State Society meeting: A. M. Schultz, Louis G. Shapiro, Jas. P. Morrill, Henry H. Brevoort, Abraham Shulman, Fred P. Lee and Frank W. Ash.

Dr. Marsh spoke on behalf of the Society for the Relief of Widows and Orphans of the Medical Men of New Jersey.

Dr. Hagen discussed the prospective dinner to be given by the New Jersey Tuberculosis League to the members of the Passaic County Medical Society on October 22, the object being to secure cooperation of the medical men of the county in impressing upon the Freeholders the need for a tuberculosis hospital, and in obtaining the proper type of institution. Drs. Ryan and Meloney also entered into the discussion.

Dr. Henry Cogan presented a printed form protesting against vaccination, that a mother had filled and presented to a school principal in Haledon, warning him that her child must not be vaccinated. Discussion brought out the fact that the medical officer had legal power to enforce vaccination but that the best results in general could be obtained by education of the parents. The secretary was instructed to write to the secretary of the Welfare Committee, concerning the incident, so that proper literature on vaccination could reach the public through the press.

Dr. Mitchell brought up the matter of the new rates under the group policy insurance for members of the Medical Society. The rates for those doing therapeutic x-ray work are to be \$70.00, while those for other practitioners are to be \$16.00. Dr. Mitchell and the x-ray men present felt the discrimination in rate to be unjust. The secretary was instructed to write to the State Society protesting against the discrimination in rates.

Dr. James M. Stewart presented the following resolution on behalf of the Society on the occasion of Dr. Johnson's death:

#### Resolution on the Death of Walter B. Johnson

Suddenly on the afternoon of July 30, death came to Walter Buckley Johnson while at play in the open fields. He was one of our most active members, and one of the oldest, having been a member since 1881. He excelled in his specialty, and was well known throughout the state, and elsewhere, as would be indicated by his membership in the following societies: New Jersey State Medical, American Ophthalmological, American Otological, American Laryngological, Rhinogological and Otological, New York Academy of Medicine, and a Fellow of the College of Surgeons.

He was thorough in his knowledge of his specialty of eye, ear, nose, throat, and always willing to impart his knowledge to others. He was a ready speaker at all times and on any occasion, with a genuine and a kindly sense of humor that broadened and illuminated his thought. Foremost in pioneer work for institutional needs, the Paterson General Hospital owes more to him than to any other one individual, and the Paterson Eye and Ear Infirmary stands a lasting monument to his persistent personal efforts.

The Red Cross Society loses its most active member and presiding officer.

Cheerfulness with efficiency were his predominant characteristics enabling him to accomplish results, even when pain was present, with the consent, and, generally, the assistance of the sufferer.

Therefore be it resolved, That the Passaic County Medical Society mourns the loss by death of Walter Buckley Johnson; a loss not

only of a capable scientist but of a reliable counsellor and an interested friend.

And be it resolved, That a copy of these resolutions be sent to his family with our lasting sympathy and our deepest regrets.

Death is not darkness complete  
With no tomorrow  
Leaving no hope behind,  
Nothing but sorrow.

Death is Night waiting the Day,  
Night with its moonbeams,  
Silvering the shadows there,  
Dim shadows of dreams.

Dawn in its beauty approaches  
The heights adorning,  
Dreams and the night are gone,  
Hail to the Morning.

—J. M. Stewart, M.D.

#### SALEM COUNTY.

William H. James, M.D., Reporter.

The annual meeting of the Salem County Medical Society was held at the Memorial Hospital, Salem, New Jersey, October 14, at 2 o'clock.

There was a fair attendance and after the regular business of the Society had been transacted we had the pleasure of hearing a paper on the "Surgical Treatment of Indigestion", by Dr. H. P. Leopold, of Philadelphia. Among other things, the speaker emphasized the fact that more than 80% of gastric disturbances were extragastric in origin. Appendicitis, gall-stone, colic and lead poisoning were often preceded by so-called indigestion attacks. Dr Leopold was given a vote of thanks for his excellent paper.

This being the annual meeting, the following officers were elected: President: C. L. Fleming, of Pennsgrove. Vice-President: L. H. Miller, Woodstown. Secretary and Treasurer: John F. Smith, of Salem. Reporter: William H. James, Pennsville. Censors: Drs. Green, Summerill and James. Annual Delegates: J. M. Summerill; alternate, William H. James. Member of Nominating Committee: R. M. A. Davis, of Salem; alternate, David M. Green. Delegates to Gloucester County: Drs. Davies, Summerill and James. Delegates to Camden County: Drs. Church, Hummel and Fleming. Delegates to Cumberland County: Drs. Davis, Green and Hummel.

Dr. Frank L. Perry, of Woodstown, was proposed for membership. The Society has lost by death recently, Dr. H. P. Johnson, of Pedricktown, who had been a member for a number of years.

The Society endorsed the action of the Welfare Committee.

#### SOMERSET COUNTY.

Dan S. Renner, M. D., Reporter.

The regular annual meeting of the Somerset County Medical Society was held in Somerville on October 8, 1925, Dr. Wild, president, in the chair.

The report of the death, on September 28, of Dr. Philip Embury, of Basking Ridge, a

past president of the Society, cast a shadow of sorrow over the meeting.

The following resolutions were adopted by Society, a copy of which were spread upon the minutes of the meeting, one forwarded to the bereaved wife, and one to the Journal:

"Whereas, our professional fraternity has been deprived by the death of our brother, Philip Embury, and,

Whereas, We wish to express our mutual regard and cherish his memory:

"Therefore, Be It Resolved: The members of Somerset County Medical Society, desirous of expressing some fitting tribute to the worth and appreciation of their deceased fellow-member and friend, Dr. Philip Embury, would by this means attest their universal recognition of the high personal standing and character of the departed; their acknowledgement of his ability and skill as a physician and the professional preëminence that marked him in his chosen branch of Medical Science; mourning his loss, yet with reverent attitude toward Him, who in the exercise of His all wise Providence has taken away our fellow-member and friend; they would extend to his family the assurance of their esteem, regard and sympathy in their mutual loss; and,

"Be It Further Resolved, that the Secretary send a copy of this Resolution to the family of the deceased, one to the State Medical Journal, and that a copy be spread upon the minutes and transactions of the Society."

Signed, Committee:

Dr. David F. Weeks,  
Dr. C. R. P. Fisher.  
Dr. A. A. Lawton.

Following the routine business, several clinical cases were discussed, after which the following officers were elected for the ensuing year:

President: Dr. John Ten Eyck, Franklyn Park. Vice-President: Dr. Dan S. Renner, Skillman. Secretary: Dr. A. Anderson Lawton, Somerville. Treasurer: Dr. Runkle Hege-man, Somerville. Reporter: Dr. E. G. Brit-han, Bound Brook. Annual Delegate: Dr. A. Anderson Lawton, Somerville, and Dr. E. G. Brithan, Bound Brook. Alternate Delegate: Dr. Malcon Smalley, Gladstone. Censors: Dr. F. A. Wild, Bound Brook, and Dr. J. A. Meight, Bernardsville. Member Nominating Committee: Dr. Lancelot Ely, Somerville.

A very enjoyable dinner concluded the meeting.

#### SUSSEX COUNTY.

H. D. Van Gaasbeek, M.D., Reporter.

The ninety-sixth annual meeting of the sussex County Medical Society was held at the Cochrane House, Newton, on Tuesday, October 13. There were 10 members present, out of a total membership of 15; a very good showing.

Dr. H. J. Harp, of Sussex, presided. All the officers were present.

Dr. Henry O. Reik, Editor of the Journal, addressed the meeting on the subject of Periodic Health Examinations, and followed his talk upon that subject by a report of the work of the Welfare Committee.

It was decided to change the time of the



annual meeting of the Society to the month of September, and it was further decided that the Program Committee should arrange for an additional meeting in the month of May. A Program Committee to consist of the President, Vice-President and one member to be appointed by the Society was further instructed, upon motion of Dr. Morrison, to endeavor to arouse more interest in these meetings and to develop special scientific programs for these occasions.

The Society unanimously recommended Dr. Blase Cole for appointment on the Welfare Committee of the State Society.

The following officers were elected for the ensuing year: President: T. L. Pellett. Vice-President: F. H. Morrison. Secretary: F. P. Wilbur. Treasurer: T. R. Pooley, Jr. Reporter: H. D. Gaasbeek. Censor: W. H. Smith. Delegate to State Society: F. H. Morrison.

After a very bounteous dinner was served by "Mine Host Hendershot" the Society adjourned.

### UNION COUNTY.

Russell A. Shirrefs, M.D., Reporter.

About 50 members risked getting "all wet" on the stormy night of Oct. 14, when the Society held its annual meeting at the Canoe Brook Club, Summit, N. J.

The Nominating Committee suggested the following names and these candidates were unanimously elected:

President: George S. Laird, Westfield. Vice-President: George L. Orton, Rahway. Secretary: George W. H. Horre, Elizabeth. Treasurer: Alden R. Hoover, Elizabeth. Reporter: Russel A. Shirrefs, Elizabeth. Censor for 3 years: Norton L. Wilson, Elizabeth.

Annual Delegates: Harry Bloch, Elizabeth; Michael Vinciguerrra, Elizabeth; Roger W. Moister, Summit; Frederick W. Sell, Rahway; Richard G. Savage, Westfield; Alfred F. Van Horn, Plainfield; George W. Strickland, Roselle.

Alternate Annual Delegates: Frank L. Foster, Cranford; Christopher A. Brokaw, Elizabeth; Caldwell B. Keeney, Summit; Watson B. Morris, Springfield.

Permanent Delegates: Milton A. Shangle, Elizabeth; B. Van D. Hedges, Plainfield; Geo. T. Banker, Elizabeth; John E. Runnells, Scotch Plains.

Member State Nominating Committee: Ellis W. Hedges, Plainfield.

Dr. J. B. Morrison, the efficient Secretary of the State Society, and Dr. H. O. Reik, ye genial Editor, were discovered in the audience and escorted forward to seats of honor. The former spoke among other things on political legislation affecting the profession; the unfortunate wrangle between the Medical Examining Boards of New Jersey and Pennsylvania; and the need of getting all reputable physicians into their respective County Societies. 35% of New Jersey's medical men still being outside the fold. (Only 5% in Union County and a committee was appointed to enroll them!) Dr. Reik explained how it had been arranged for him to broadcast through radio station WHAR at Atlantic City, a series of ten talks on "Keeping Well". These will be given at 7:30 Thursday evenings. He was invited to

address us at the January meeting on the subject of Periodic Health Examinations.

The Society went on record as favoring the enactment of the "Doctors' Title Bill", but left pressing the matter at present to the good judgment of the Welfare Committee. It was decided to increase our annual dues to \$12, of which \$10 would be apportioned to the State Society, and \$2 for our own modest needs. After the treasurer reported the comfortable balance of \$644.74 on hand, murmurs were heard that a dinner might not be a bad idea to help dissipate the unearned increment. Another letter from the State Board of Medical Examiners concerning the restoration of Dr. I. A. Lawrence's license to practice medicine was read. Eight of our members spoke in opposition to the re-instatement of Dr. Lawrence, and this letter was received and placed on file. There were 4 proposals for membership for action at our next meeting, and these gentlemen were admitted: Dr. E. J. Carlin, Rahway; Dr. H. A. Abel, Elizabeth, and Dr. S. W. Eason, Summit. Dr. McElhinney, the retiring President, spoke on "The Acute Abdomen". His talk was discussed by Drs. Green, Shangle, Lerman, Brokaw and Moister. The Summit Medical Club graciously invited the Society to attend a lecture two weeks hence by Dr. Gregory Cole on gastric and duodenal ulcers, illustrated by moving pictures of a test meal.

It didn't rain in the afternoon, so 27 of our gifted specialists held a successful golf clinic; the 19th hole was a savory chicken dinner.

### WARREN COUNTY.

F. A. Shimer, M.D., Reporter.

At the annual meeting of the Warren County Medical Society, held October 13, 1925, at the Belvidere House, Belvidere, Dr. L. H. Bloom, of Phillipsburg, was elected president. The business session began at 11 a. m. Later dinner was served. There was a large attendance, and committees were named to complete arrangements for the celebration of the 100th anniversary of the organization of the society on November 10 next. The celebration will be held in Belvidere.

The officers elected follow: Dr. R. D. Stone, Phillipsburg, Vice-President; Dr. L. C. Osmun, Hackettstown, Secretary; Dr. G. W. Cummins, Belvidere, Treasurer; Dr. F. A. Shimer, Phillipsburg, Reporter; Delegate to State Medical Society, D. C. H. Lyon, Phillipsburg; Alternate, Dr. F. W. Curtis, Stewartsville; Censor, three years, Dr. W. C. Allen, Blairs-town; two years, Dr. Arthur Zuck, Washington; Member State Nominating Committee, Dr. C. H. Lyon, Phillipsburg; Member State Welfare Committee, Dr. T. S. Dedrick, Washington.

In the future stated meetings of the Society will be held the second Tuesdays in January, April, July and October. The members will continue their efforts for the passage of the Doctor's Title Bill in the State Legislature. Dr. Arthur Zuck, Washington; Dr. W. C. Albertson, Belvidere, and Dr. William Kline, Phillipsburg, were appointed a committee to assist the State Board of Health in drafting uniform quarantine laws.



**TRI-COUNTY SOCIETY MEETING.****Monmouth, Mercer and Middlesex.**

S. H. Nichols, M.D., Reporter.

Combining a scientific meeting with an afternoon of golf, the Monmouth, Mercer and Middlesex County Medical Societies met at the Deal Golf Club at the invitation of the Monmouth County Medical Society on September 23. After a golf tournament in the afternoon, the evening was devoted to a highly interesting and instructive paper given by Dr. Louis G. Cole, of New York, on "Gastric Ulcer".

Dr. Cole gave over the first part of his talk to a discussion of the various types of gastric ulcer and gave an original classification of this condition based on personal observation in his x-ray work. This was not alone based on x-ray evidence but took into consideration the pathology as found at operation. Dr. Cole is well able to make a classification of this kind because he has had such a wonderful opportunity to see the cases he has radiographed operated upon. Passing from the classification, he took up the treatment of the various types.

Following his paper on gastric ulcer, Dr. Cole showed 2 reels of motion pictures on "Gastric Motility", which were made under his direction and which embody some new ideas on the normal motion of the stomach. This is original research on the part of Dr. Cole and was enthusiastically received by the 75 members present.

This is the first attempt at a tri-county meeting in this section and from the gratifying success of the first gathering it will be made a yearly event, with the meeting going to Trenton next fall at the invitation of the Mercer County Society. In all probability Ocean County will be included in next year's meeting.

The golf tournament held in the afternoon resulted in a complete victory for the Monmouth County delegation, as Dr. James A. Fisher, of Asbury Park, carried off the individual honors with a net score of 65 and assisted his Monmouth County comrades in winning the county team prize.

The net scores were as follows:

Dr. James A. Fisher, 65; Dr. H. W. Ingling, Freehold, 76; Dr. R. L. McKiernan, Raritan, and Dr. J. H. McCollough, Trenton, tied for third and fourth place with 77; C. F. Adams, Trenton, and O. K. Parry, Asbury Park, tied with 79; F. G. Scammell, Trenton, 80 and P. Douress, Trenton, 82.

The team prize awarded for the first four in each county with the lowest aggregate scores was won by Drs. Fisher, Parry, Wagner and Prout. G. J. Sommer of Trenton, won the booby prize with 131.

Other scores were as follows: C. D. Prout, Asbury Park, and D. B. Ackley, Trenton, 83; J. F. McGovern, New Brunswick, 84; H. R. North, Trenton, 85; C. H. Waters, Trenton, 89; E. C. Wagner, Asbury Park, 90; W. S. Tilton, Manasquan, 92; L. Y. Lippincott, Metuchen, 94; W. Madden, Trenton, 94; S. W. Hadsman, Red Bank, 96; J. E. Maher, Long Branch, 99; W. R. Little, Trenton, 100; W. H. Herrman, Asbury Park, 101; and William Donovan, Manasquan, and J. B. Makin, Asbury Park, each 103.

**Association of Military Surgeons of the United States.**

William G. Schauffler, M.D.,

Col. M. R. C., U. S. A., Reporter

The thirty-third annual meeting of the Association of Military Surgeons of the United States was held in New York, October 8-10, 1925. Headquarters were at the Waldorf-Astoria, and the meeting was very largely attended and full of interest from beginning to end. At the final session on Saturday morning, 205 members and foreign guests had registered. The guests represented Great Britain, France (3 officers), Italy, Greece, Poland, Latvia, Argentine (2), Venezuela, Uruguay and Japan (2).

Instead of listening to papers, the members of the Association were taken on Thursday, after the business meeting in the morning, to inspect the Army Medical Supply Depot in South Brooklyn, and then to the Navy Laboratories and the Naval Hospital, where the wards were inspected and the reconstruction work examined. The "Navy Supper" served at the hospital turned out to be a most wonderfully cooked and served dinner of seven courses, which was greatly appreciated by all.

Friday was spent at Ellis Island, where the Association was the guest of Surgeon-General Hugh S. Cumming, U. S. P. H. S. and his officers, and where opportunity was given to see the workings of the Immigration Station, as well as the hospitals. Owing to the heavy fog, the visit to the Quarantine Station, at Hoffman Island, was given up.

The dinner at the Waldorf on Friday evening was made memorable by a remarkable address by Dr. George E. Vincent, President of the Rockefeller Foundation.

Saturday morning's business session closed the annual meeting and Rear Admiral Stitt, Surgeon-General of the Navy, was elected President for the ensuing year.

The National Guard Medical Service of New Jersey was represented by Colonel John H. McCullough, M. C., commanding the First Medical Regiment, and several regimental medical officers. There were also present several Medical Reserve Officers from New Jersey, but the representation was far below what it should be, when one considers the importance of membership in this association and the advantages it offers.

The next annual meeting will be held in Philadelphia in the fall of 1926 in connection with the sesqui-centennial celebration of that city.

**Terrific Responsibility.**

Wife—Horace, darling, drive carefully, won't you? Remember, we have Fido with us!—Motor Life.

An old couple, husband and wife, were quarreling. "Why is it," some one asked, "that you always quarrel so, while the cat and the dog lying in front of your fire-place manage to get on beautifully?" "Ah, answered the woman, "just tie them to gether and see what will happen."

## In Lighter Vein

**A Hay Fever Idyl.**—A little stalk of golden-rod was just about dry enough to blow away. "As a broadcaster," he chuckled, "I claim to rank with the most powerful station in the country. Wonder how many are tuned in?"

A scattering volley of sneezes told that a number of people were already getting him.

—Ladies' Home Journal.

"You say he's some crap shooter."

"Yes, he took up a course in chiropractic to learn how to manipulate the bones."

Marie Cahill—"Keith's"

"I told Tom that the average woman's clothing only weighs eight ounces."

"And what did he say?"

"He thought it was a shame they had to wear such heavy shoes."

—Princeton Tiger.

"We need a slogan, 'Vote as you drink,'" declared United States Attorney Buckner, of New York, recently.

But it's against the law to vote that often.

—Life.

Work hard and save your money and when you are old you can have the things only young people can enjoy.

—Columbia Record.

### Her Last Place.

Mistress (to prospective maid): You tell me you worked three years for a profiteer's wife and she didn't give you the least recommendation?

Maid: No—but that's because she didn't know how to write.

—L'Illustration (Paris).

### Geography on the East Side.

Teacher: Name an island near New York City.

Johnny: Blackwell's.

Teacher: Name something on it.

Johnny: Me brudder.

—New York World.

A Russian has devised a system which makes it easier for the novice to play the saxophone. Nothing but bad news ever seems to come from that miserable country.

—Punch.

Stuttering Mose—Just think, t-that b-b-beautiful b-b-butterfly once c-c-came from a cocoon.

Rastus—Goo Lord, Ise guess we is the ancestors of everything.

—Cornell Widow.

A scientist has perfected a machine that cures insomnia. This should put thousands of sheep out of work.

—Life.

## Personals.

Dr. Samuel E. Robertson, president of the Dime Saving Institution of Newark, has returned from an auto trip through New England and Canada. His brother, John H. Robertson of California, and their wives made the trip and visited Brantford, Ontario, where all were born.

Dr. Sidney A. Twinch, of 24 Fulton Street, Newark, who went to Florida for a rest of two weeks, has returned home.

A bungalow belonging to Dr. and Mrs. Samuel Stage at Cedar Lake was destroyed by fire of unknown origin last month. Dr. and Mrs. Stage, whose home is 601 Clinton Avenue, Newark, had returned to that city for a few days and had intended to spend weekends and holidays at Cedar Lake.

Dr. and Mrs. Linus W. Bagg, formerly of 712 Clinton Avenue, Newark, are now occupying their new home at 14 Harrison Avenue, Montclair. Dr. Bagg will continue to practice in Newark with offices at 87 Lincoln Park.

Dr. Walter A. Reiter, of De Forrest Avenue, Summit, has returned from an extended auto trip in Maine and New Brunswick, spending some time on the St. John River. Mrs. Reiter accompanied him.

Dr. and Mrs. Charles F. Baker, of 198 Clinton Avenue, Newark, are planning to keep their summer home at Basking Ridge open until late in the fall, probably returning some time before Thanksgiving. Dr. Baker is in the city daily.

Dr. and Mrs. Clarence V. R. Bumsted and Miss Marjorie Bumsted have returned to their home at 235 Grafton Avenue, Newark, after spending about three months at Lake Placid.

Dr. Fred H. Morrison, of Newton, was elected president of the Tri-County Medical Association of Warren, Sussex and Morris at the twenty-seventh annual meeting held at Phillipsburg on October 20th. Other officers elected include: First vice-president, Dr. Clifford Mills, of Morristown; second vice-president, Dr. John Burd, of Belvidere; secretary, Dr. Charles B. Smith, of Washington, and treasurer, Dr. F. W. Flagge, of Rockaway.

Dr. and Mrs. Henry H. Kessler, of 91 Clinton Avenue, Newark, have been attending the National Civilian Rehabilitation Conference at Cleveland where he will read a paper. From there they visited Detroit, Buffalo and Ithaca before returning home.

Dr. and Mrs. Clement Morris, of 75 Washington Avenue, Newark, have returned home after spending several days at the Marlborough-Blenheim, Atlantic City.

Dr. and Mrs. Charles E. Teeter and their son, Charles E. Teeter, Jr., of 418 Orange Street, Newark, who have been spending a month at their cottage at Bailey Island, Me., have returned to their city home.

Miss Susanne Becker, daughter of Dr. and Mrs. F. W. Becker, of 14 Clinton Place, Newark, is on a southern motor trip. She accompanied her aunt, Mrs. L. E. Roy, of New York, a writer, who plans to get material for a new book en route. The two will camp along the way and plan to go through the



Shenandoah Valley and then to Charleston, S. C. From there they will go along the coast to Miami and will probably return to Newark in the middle of December.

Dr. and Mrs. Elmer G. Wherry, of 325 Clinton Avenue, Newark, have returned to their home after spending several months in the Adirondacks. They had a camp at Rainbow Lake and spent some time on a motor trip.

Dr. and Mrs. James Spencer Brown and Miss Dorothy Brown, of 43 South Fullerton Avenue, Montclair, have gone to their winter home at Pinehurst, N. C.

Dr. George N. Waite and family have returned to their home at 569 High Street, Newark, after spending about three months at Beaver Lake. Dr. Waite spent a few days each week in the city and joined his family for the remainder of the time.

Dr. and Mrs. Walter C. Richman and their daughter, Miss Evelyn Richman, of 165 Roseville Avenue, Newark, have returned to their home from a four-day motor trip to Oil City, Pennsylvania.

Dr. W. R. Ward, of Chancellor Avenue, Newark, has returned from a flying visit to Cincinnati.

Dr. F. W. Hagney, of 669 Elizabeth Avenue, Newark, has completed a visit to Chicago and a tour of the Great Lakes. He was accompanied by his wife and daughter.

Dr. Henry Wallace, formerly of 210 Ridgewood Avenue, Glen Ridge, has after 20 years of practice in Glen Ridge, removed to 114 East Fortieth Street, New York City, and resigned from the Essex County and the New Jersey State Medical Society. He was, for those twenty years, on the Medical Attending Staff of the Mountainside Hospital, and Founder and Director of the Cardiac Department. He was, also, a Charter Member of and formerly President of the Associated Physicians of Montclair and the Vicinity. He is a Fellow of the New York Academy of Medicine and also of the American College of Physicians. His old New Jersey associates wish him every success in his new location.

## Marriage.

MELLEN-FRIEDLEIN.—On October 3rd, 1925, at Bloomfield, N. J., Mrs. Madelyn Crane Friedlein to Dr. Stanley Henry Mellen, of 759 Highland Avenue, Newark.

## Death.

ALLEN, Charles Clifford—On Monday, October 26, 1925, Dr. Charles C. Allen, a prominent physician of Absecon, Atlantic County, New Jersey, died at his home, a martyr to his professional work.

Last Winter, when the "flu" swept the mainland, Dr. Allen worked unceasingly in caring for his patients, disdaining rest. He suffered a nervous breakdown. His condition was aggravated by the development of an abscess in

his lungs. His heart became affected. During the last 15 weeks he waged a brave but vain fight against death.

His wife, Mrs. Rena Allen; his daughter, Dorothy, and his son, Charles Clifford, Jr., were at his bedside when he passed away. Dr. Allen is survived also by his mother, Mrs. Rebecca Allen, aged 83.

Dr. Allen was the son of the late Samuel Allen, of Bridgeton. In 1899 Dr. Allen came to Absecon from Hahnemann Hospital, Philadelphia, and for 26 years practiced his profession there. He was one of the best beloved physicians on the mainland.

### The Summit Medical Society.

The Summit Medical Society held its regular monthly meeting on October 27 at the Canoe Brook Country Club, the President, Dr. Raymond D. Baker, presiding.

Moving x-ray pictures of Gastric and Duodenal Ulcers by Dr. Cole, of New York, were shown and were of great interest, leading to an interesting discussion of such cases.

Appropriate action was taken by the Society in regard to the death last month of one of its members, Dr. Philip Embury, of Basking Ridge.

The vacant membership thus created was filled by the election of Dr. Samuel Eason, of Summit.

## Book Reviews.

*All books received will be mentioned by title with the names of their authors, publishers, etc., and this will be considered by the committee as sufficient acknowledgment to the publishers. Selections will be made for review as the merits of the books or the interests of our subscribers may warrant.*

**Symptoms of Visceral Disease**—A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine, by Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., Medical Director, Pottenger Sanatorium for the Diseases of the Lungs and Throat, Monrovia, California. Third Edition. 96 Illustrations. 394 pages. Price, \$6.50. Published by the C. V. Mosby Company, St. Louis.

The repeated editions of this work indicates its wide spread popularity with the medical profession.

In its last edition, the subject matter has been rearranged to harmonize with the growing importance of particular departments of study and one entirely new chapter on the relation of the Ionic Content and Physical State of the cell to activity and Nerve Stimulation, has been added.

The author has kept pace with modern investigation and his new presentation is not only readable and interesting, but also full of valuable information.

**Applied Pathology**—In Diseases of the Nose, Throat and Ear, by Joseph C. Beck, M.D., F.A.C.S., Associate Professor of Laryngology, Rhinology and Otology, University



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## THE PRINCIPLES OF CHEMOTHERAPY.

JOHN A. KOLMER, M.D.,

Professor of Pathology and Bacteriology in the Graduate School of Medicine  
of the University of Pennsylvania.

(The Oration in Medicine delivered at the 159th Annual Meeting of the  
Medical Society of New Jersey, Atlantic City, June 18, 1925, con-  
densed by the author himself into this summarized form.)

### Summary

(1) In a general sense *chemotherapy* refers to the treatment of disease with chemical agents and in this respect is as old as the art of medicine; but in the modern sense the term was coined by Ehrlich to designate a new science for the production of chemical agents possessing a high selective parasitocidal action in the body with a minimum of toxic effects for the body cells.

(2) The science of modern chemotherapy has been developed largely by the labors of Ehrlich. Even as a medical student he was imbued with the idea that chemical agents may exist or could be produced synthetically which, when injected into animals, would selectively attack certain cells. This led him to work with the dyes in the staining of blood and in vital staining. In 1904, following the discovery of trypanocidal activity of atoxyl and its curative effects in syphilis, Ehrlich undertook a prolonged series of investigations with the organic arsenicals, aiming to reduce their toxicity and increase their parasitocidal properties, which finally resulted in the discovery of salvarsan (arsphenamin) and neosalvarsan (neoarsphenamin), constituting the greatest achievements in chemotherapy up to the present time.

(3) Chemical agents from the chemotherapeutic standpoint may be said to possess two primary properties, namely, toxicity for the

host called *organotropism*, and toxicity for the parasite designated as *parasitotropism*.

(4) The purpose of chemotherapeutic research is to produce chemical agents possessing a sufficiently low organotropism and a sufficiently high parasitotropism to permit the administration of sufficient amounts to bring about the destruction of organisms without danger to the patient.

(5) The relation between the maximum tolerated and minimal curative doses of a compound is designated as the *chemotherapeutic index*. For example, the minimum tolerated dose of arsphenamin for rabbits is about 0.140 gm. per kilo; the minimal curative dose for syphilitic rabbits is about 0.012 gm. per kilo, which gives the fraction  $0.140/0.012 = 12.5$  the chemotherapeutic index.

(6) Organotropism and parasitotropism were explained by Ehrlich in a *theory of chemoreceptors*, which is similar to his side chain theory of immunity, in that the body cells and parasites for which a drug has an affinity are supposed to possess certain specific receptors or grasping arms for union with the compound. But this theory is not now generally accepted since it would appear that organotropism may be a matter of chemical interaction between the drug and a protoplasmic constituent of the body cell while parasitotropism is a similar interaction between the drug and a constituent of the parasite.

(7) Chemotherapy seeks to unravel the laws governing the relation between chemical constitution and biologic action of drugs. At present we possess some information along these lines with arsenical, mercurial, dye and other compounds but not enough to formulate definite laws. Much more information is demanded and especially regarding the chemistry of the parasitic agents we seek to destroy in relation to the chemistry of chemical compounds. At present chemotherapeutic investigation is still largely upon the "hit and miss" basis by which compounds are made and then studied for toxicity and therapeutic effects in the lower animals. The toxicity and possible therapeutic effects of a new compound cannot be usually foretold accurately by chemical structure or analysis alone; actual animal tests are required which render chemotherapeutic research very laborious and expensive.

(8) Compounds highly destructive for parasites in the test tube may be without parasitocidal activity in the living animal; on the other hand compounds like arsphenamin possessing but feeble activity in the test tube may be much more active in the body. Test tube tests therefore, are not always reliable or acceptable as substitutes for animal tests. Just how chemical agents destroy parasites in the body and in the test tube is not known;

very probably the mechanism varies according to the compound. But apparently a parasitidal agent first destroys the ability of the parasite to reproduce itself and finally may destroy it totally by some alteration of its chemistry interfering with life processes and especially internal respiration.

(9) It is commonly stated that chemical agents like arsphenamin and mercury owe their therapeutic efficacy to a stimulation of immunologic resistance. It is probable that they may by releasing antigenic substances from parasites in time stimulate the antibody producing tissues, but there is no definite evidence to show that the drugs themselves directly stimulate antibody production.

(10) Unfortunately, parasites, including *Spirochaeta pallida*, may acquire a resistance to chemical agents designated as "drug fastness" and analogous to the acquisition of drug tolerance for morphin, nicotin, etc. This may complicate chemotherapy and led Ehrlich into the hope that it would be possible to produce drugs capable of completely destroying all parasites in the tissues in a single dose (*magna therapie sterilisans*). But, except possibly in the treatment of yaws with arsphenamin, this ideal has not yet been realized and certainly not in the case of syphilis.

(11) Pathologic states may influence chemotherapy in two main directions. In the first place disease of the kidneys or liver may interfere with elimination, and cardiovascular disease may likewise influence the matter of toxicity. In the second place, however, disease may actually increase tolerance for a drug, like quinin in malaria and pneumonia, the iodids and mercury in syphilis, etc. But the physician practicing chemotherapy and especially the treatment of syphilis, should carefully estimate the condition of each patient in relation to tolerance for the drugs employed and especially in the treatment of chronic syphilis.

(12) Arsphenamin, neoarsphenamin, sulpharsphenamin and tryparsamid, products of chemotherapeutic research, have proven of great value in the treatment of syphilis, yaws, relapsing fever, bronchial spirochetosis, trypanosomiasis and other spirochetic and protozoan diseases. It is entirely reasonable to expect that the judicious administration of these compounds is capable of curing syphilis and especially when treatment is undertaken in the early stages. Even in the late stages of syphilis arsphenamin and its substitutes are proving of great value in treatment and notably when administered in conjunction with mercury, bismuth and iodids.

(13) Chemotherapy has also proven of great value in the treatment of malaria, various types of leishmaniasis, amebic in-



fections, schistosomiasis and various other protozoan and metazoan diseases.

(14) In bacterial diseases chemotherapy has made some advance and especially in the treatment of local infections, but it is not unreasonable to expect that specifics will be gradually evolved for tuberculosis, pneumonia, typhoid fever and other systemic infections.

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## **CARCINOMA OF THE BLADDER: TREATMENT BY A COMBINATION OF SURGERY, ELECTROTHERMIC COAGULATION, RADIUM, AND ROENTGEN RAYS**

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J. THOMPSON STEVENS, M. D.,  
Montclair, N. J.

First, I wish to express my appreciation and thanks to Dr. Gordon K. Dickinson for the interest he has shown in radiation therapy. It is because of his request that I am here at the 159th Annual Meeting of the Medical Society of New Jersey to discuss with you carcinoma of the bladder, and the technic of its treatment by a combination of surgery, electrothermic coagulation, radium, and the Roentgen rays. This method of treatment is not new. In fact, the agents already mentioned have been used singly or in combination, other than that advised, by other workers. My own interest in the subject was initiated by the report of Pfahler and Thomas who presented the same subject before the Section on Urology at the Seventy-second Session of the American Medical Association. Their report was based upon 26 cases treated with the result that only 2 died while in 1 other case it was impossible to get a report. Several of the patients, however, at the end of treatment, still had bladder symptoms such as one would expect following any treatment of the bladder which is followed by the production of scar tissue. They said, "We desire simply to describe the techinc evolved from experience and at present employed in this surgically unwelcome and disheartening type of formerly inoperable bladder and prostatic carcinoma, and to say that it is our conviction that the treatment here described and practiced offers more in the way of prolongation of life, if not cure in a few rare

instances, than any other method of treatment heretofore employed in this particular deplorable type of malignant disease."

My own experience is based upon the results obtained in the treatment of 8 cases by the radical technic to be described below.

I, of course, appreciate the fact that the series is too small and the time too short to draw any conclusions. However, the fact that 8 patients so treated are free from all signs of carcinoma, justifies this report. Eleven others have been treated but the condition of these patients was such that the radical treatment was contraindicated. Roentgen rays only were used in these cases, all receiving some palliation; 1 patient died 2 years after treatment, death being due to pneumonia, at which time there had been no

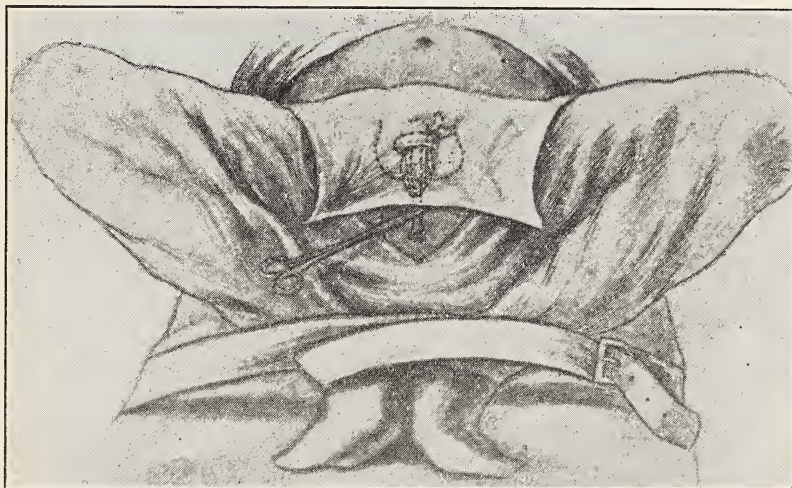


Fig. 1—Position of patient for suprapubic cystotomy, Bladder filled with silver nitrate solution, clamp on catheter, and tourniquet about body of penis. (Pfahler & Thomas).

sign of disease of the bladder other than frequency, which was natural because of the decreased capacity of the bladder.

### Diagnosis.

Carcinoma of the bladder should be suspected whenever a patient at about the cancer age complains of hematuria, sudden stoppage in the stream of urine, cystitis, pain, fragments of tissue in the urine, frequent micturition, and the general symptoms common in cancer no matter where the location of the growth. You are all familiar with the appearance of the heart shadow in roentgenograms of the chest. The heart stands out clearly because of the fact that it is surrounded by the lungs which contain air. By filling the bladder with air a tumor of the bladder will cast a similar shadow upon Roentgen examination. Whether or not any growth



so demonstrated is carcinoma must, of course, be determined by microscopic examination. The only positive method of determining the condition of the interior of the bladder is by means of the cystoscope, which enables us to recognize the situation of the growth, as well as the state of the vesical mucous membrane.

### Roentgen Treatment.

Whenever possible, it is probably best to begin with thorough

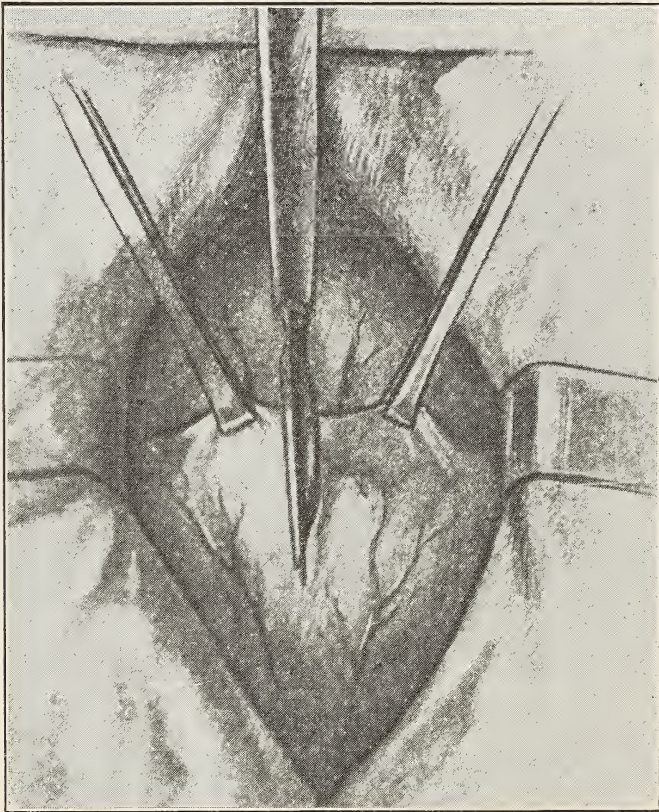


Fig. 2—Bladder exposed and grasped by forceps before catheter is released and removed. Bladder incision high up on fundus. (Pfahler & Thomas).

treatment of the contents of the pelvis with Roentgen rays. Using not less than 200,000 volts, the duration of exposure over each port, together with the number of ports necessary efficiently to ray each and every centimeter of the tissues of the pelvis, are carefully determined by actual measurements of the patient's pelvis. Just how these pelvic measurements, together with the measurements of the rays, are made and utilized will be demonstrated in a moment by means of lantern slides. Suffice it to say



just now that this part of the treatment will generally take about 7 hours to complete in the average sized patient; larger patients requiring a proportionately longer time. This preliminary treatment is given during the first week and I believe is justified because the patient will reach the operating room during the second week in a considerably improved condition, though he may have

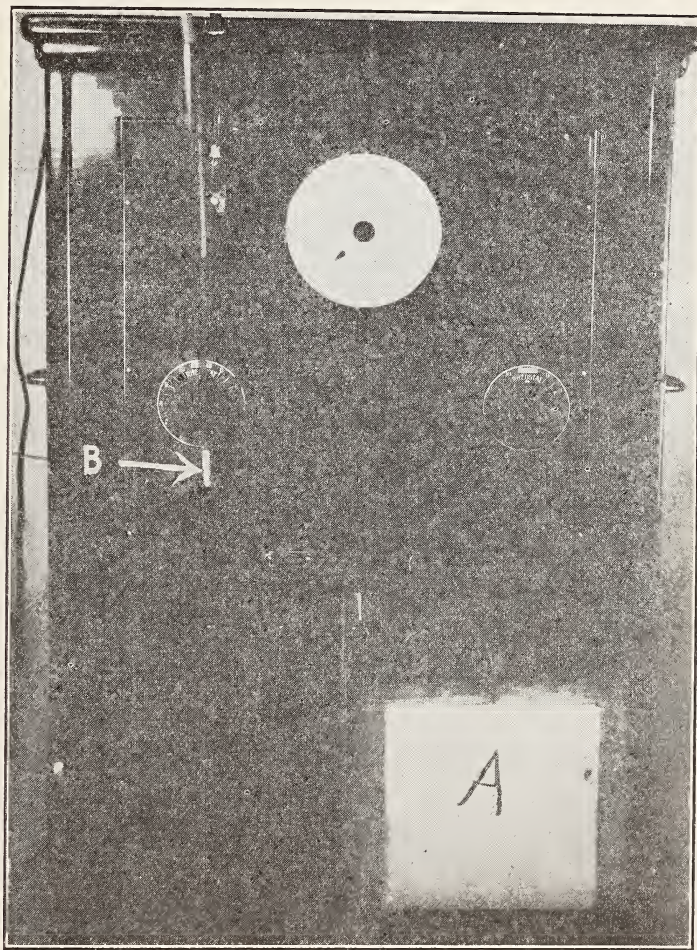


Fig. 3—Apparatus for electrothermic coagulation which has been made portable. (a) Indifferent electrode which is placed under buttocks, (b) Active electrode for destruction of tumor.

had a few days of increased difficulty immediately following treatment. Hemorrhage and pain are generally controlled before the surgical part of the treatment is undertaken and the possibility of transplanting viable cancer cells by our surgical manipulations is considerably lessened, which is, of course, the chief reason in advising preoperative Roentgen treatment in any case of carcinoma.



### Surgical Technic.

Attention to preoperative details is just as essential here as in other procedures in this type of case. The kidney condition must be determined, the chemistry of blood must be investigated, and any indicated preoperative treatment prescribed. Diabetes must be ruled out or brought under control.

The patient is placed on his back with the thighs abducted,

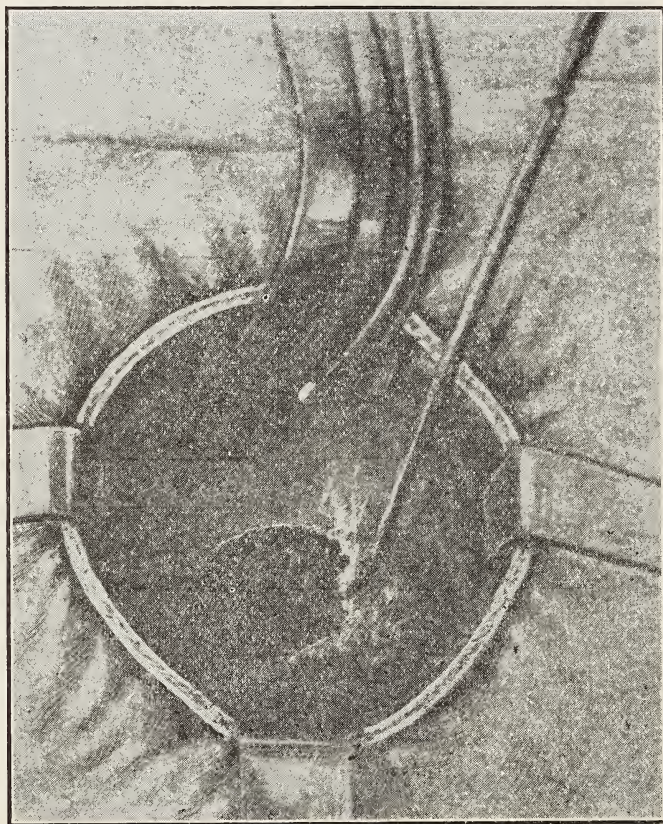


Fig. 4—Electrothermic coagulation of tumor within the bladder by means of a suprapubic cystotomy. (Pfahler & Thomas).

knees partially flexed, feet strapped together as in Fig I. The bladder is then filled with a 1:6000 solution of silver nitrate, a clamp applied to the distal end of the catheter, and a tourniquet placed around the body of the penis to prevent escape of the solution from the bladder. Then, under the usual surgical precautions, a suprapubic cystotomy is done, the bladder not being opened until the fluid escapes following release of the catheter clamp, and finally the removal of the catheter. (Fig. 2). By this means, one has almost an unlimited field for inspection and destruction of the growth by means of electrothermic coagulation, and the method is preferable

to attempt at destruction through a cystoscope. Experts in electrothermic coagulation are seldom experts in cystoscopy, and vice versa; therefore, if thorough work is desired the suprapubic route is the one of choice for destruction of the growth as well as for the subsequent accurate application of radium.

### Electrothermic Coagulation.

The term electrothermic coagulation at once conveys to one's

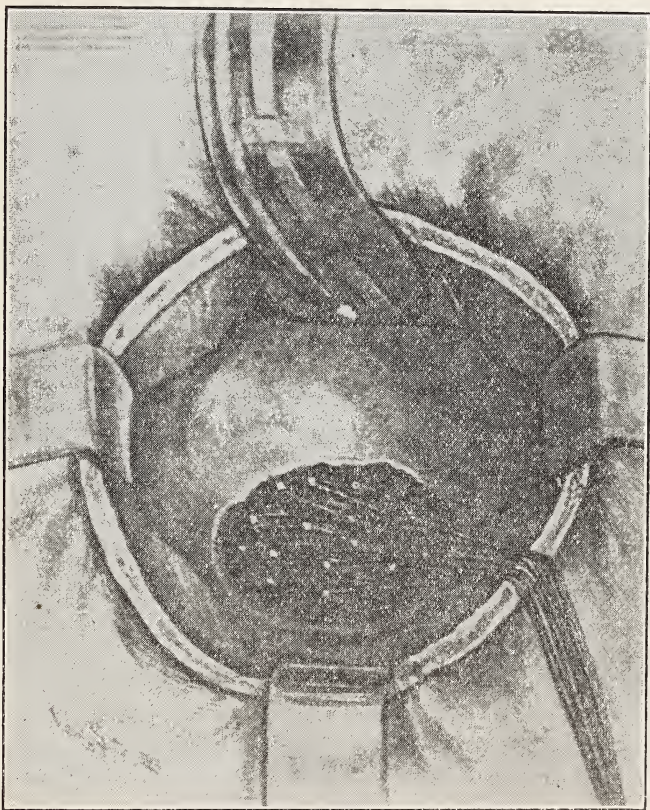


Fig. 5—Radium needles placed in base of tumor following electrothermic coagulation and removal of the tumor. (Pfahler & Thomas).

mind the fact that there is a production of heat by an electric current of sufficient intensity to coagulate the tissues to which the current is applied. The applicator is cold at all times, the heat appearing only in the tissues treated, and being caused by the oscillations of a high frequency current, the applicator in general use being a pointed instrument. As compared with excision, it has the enormous advantage of *destroying the malignancy before it is removed*. It is impossible to overestimate the value of the fact that



with coagulation the growth is removed as a dead mass of tissue instead of as a mass of viable cells. This, plus the fact that the lymphatics and blood-vessels supplying and draining the affected area are closed, tends to remove the possibility of mechanical metastasis. Heat develops in the tissues treated because of their resistance to the flow of the current. Therefore, it is progressively more penetrating the larger the amount of current used and the



Fig. 6—Sagittal section, radium needles in place with their threads passed through drainage tube. (Pfahler & Thomas).

longer it is applied. The actual cautery, as we all know, rapidly heats the tissues to which it is applied to a very high temperature, the tissues being charred if subjected long enough. But the actual cautery does not produce sufficient heat deep down in the tissues and, therefore, the results in treatment of malignant lesions by actual cautery fail to compare with those obtained by means of electrothermic coagulation. (Figs. 3 and 4).

In the coagulation of bladder tumors the operation must be carried

out slowly to prevent injury of the normal bladder by escaping steam, but the work must be completed at one sitting if best results are to be obtained. For the smaller lesions the Oudin or monopolar current is used. The proper amount of current to use must be learned by experience. The pointed electrode or applicator is held close to the tissues so that sparking occurs. This sparking is continued until all of the tumor mass is necrotic, dried

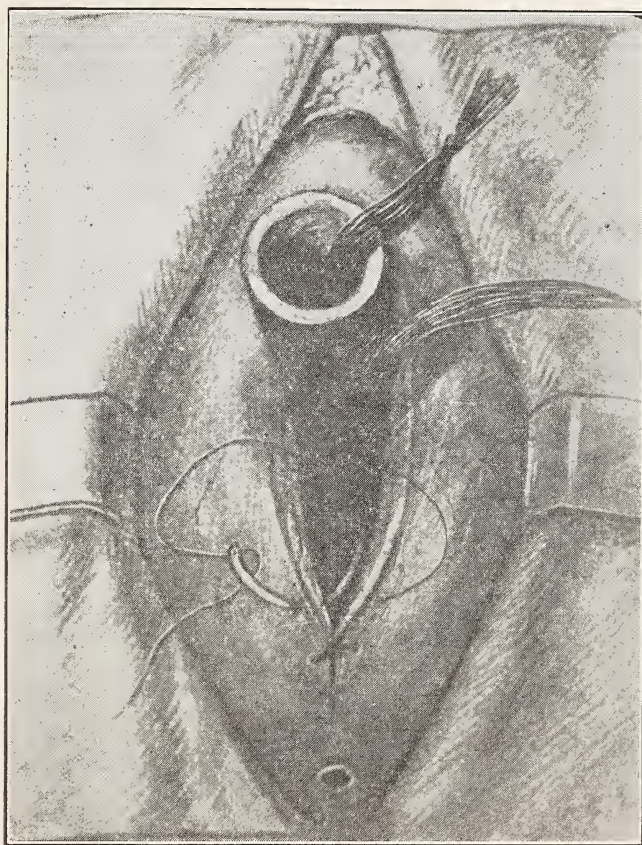


Fig. 7.—Closure of Bladder showing placement of drainage tubes and threads to radium needles. ((Pfahler & Thomas).

out, or desiccated. If the lesion is large enough, the applicator may be run into the growth to produce deeper desiccation. An assistant should have his finger in the rectum to prevent any possible damage to that organ. The desiccated mass is then removed with a curet and, if properly done, there will be no bleeding provide one is careful not to curet beyond the coagulated tissues.

For the larger tumors, the d'Arsonval or bipolar current is used. With this current, deep heat in sufficient quantities to de-



stroy any tissue of the body, including bone, can be obtained. Therefore, in any but experienced hands it is most dangerous because even the rectum and sacrum may be seriously injured. A large pad or metal electrode is connected with one pole of the machine, and placed under the buttocks of the patient. This electrode must be well wetted, preferably with saline, else the patient's skin may be burned at this point. To the other pole of the machine, the active electrode is attached. The point is then

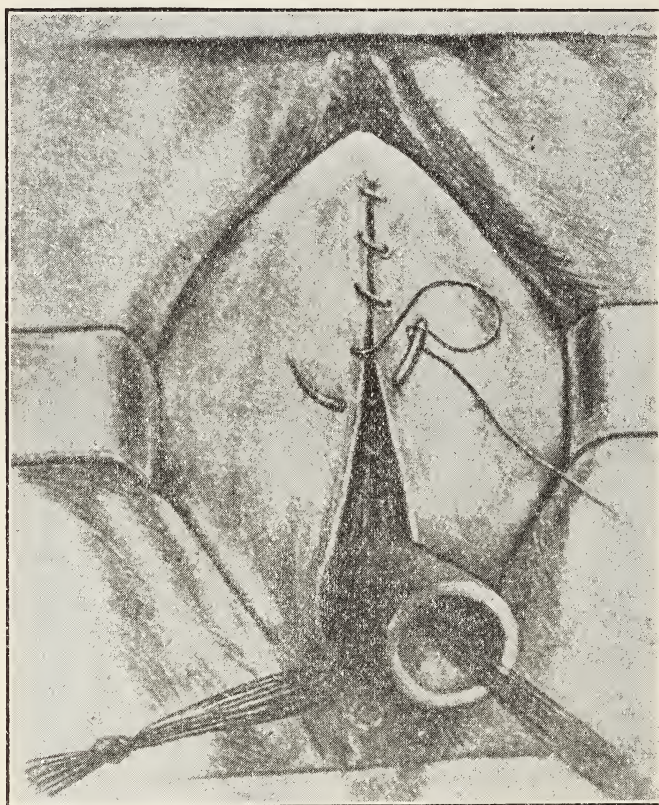


Fig. 8—Bladder rotated downward by drainage tube which is fixed by stitches through lower angle of skin incision. Recti muscles and fascia are being closed. (Pfahler & Thomas).

held in contact with the tissue to be destroyed and the current is turned on. No rule can be given for predetermination of the amount of current to use. There is no guide that can be advised save that gained by experience with this method of operating. The coagulation is completed at one point when the tissues are dead white or coagulated, and the current is switched off just before sparking begins. In this manner all of the tumor must be destroyed or coagulated before it is removed.



### Radium Therapy.

(Fig. 5.)

Immediately after the growth is completely destroyed by coagulation and all but the coagulated base removed, the bladder is irrigated with a warm 1:6000 silver nitrate solution and sponged dry. The incised edges of the bladder are painted with a 5% solution of resorcin. Then radium needles of 5 to 10 milligram

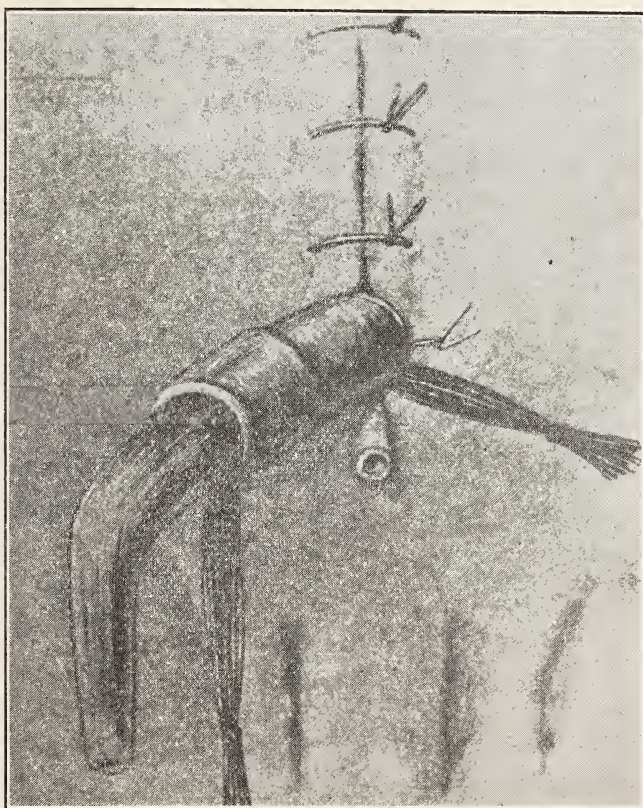


Fig. 9—Skin sutured showing drainage tubes and threads to radium needles. (Pfahler & Thomas).

capacity are buried deeply into the coagulated base. The needles are placed 1 to 2 cm. apart and left in place for from 8 to 16 hours, according to one's clinical interpretation of the indications. It is most important that sufficient radium be at hand to permit one to place one of the 5 mgr. needles in each centimeter of tumor coagulated, or one of the 10 mgr. needles in every 2 cm. of coagulated tumor base. This is the only plan that will insure anything like a homogeneous radiation of the base, and if the tumor be

not homogeneously radiated nothing but palliation is to be expected.

### Surgical Technic Continued.

Next, a large fenestrated rubber drainage tube is introduced into the bladder so that it does not rest upon the trigon (Fig. 6), and is held at the upper angle of the incision of the bladder by suturing from below upward with continuous chromic gut. (Fig 7). The threads for the radium needles are passed through this tube.

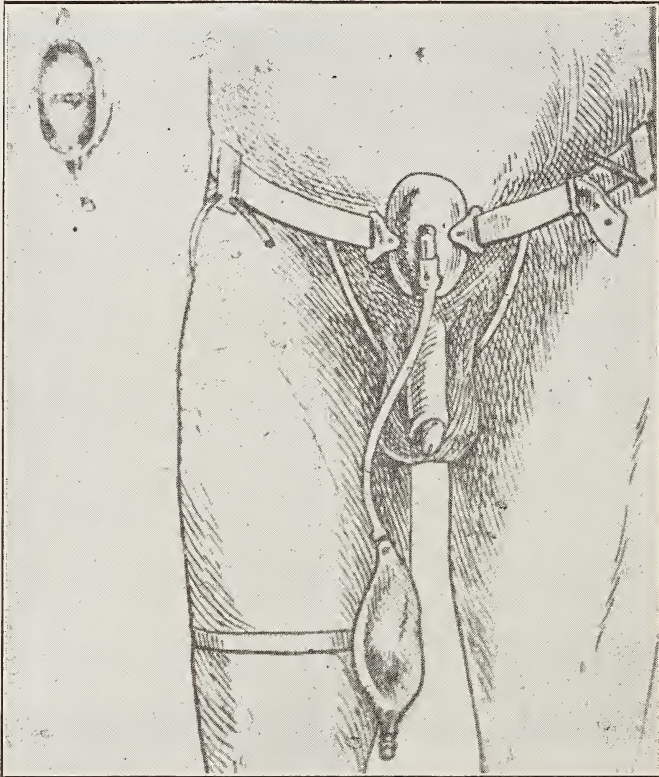


Fig. 10—Ambulatory suprapubic drainage apparatus used on removal of the Bladder drainage tube. This is removed as soon as the fistula to the Bladder is healed.

A small fenestrated rubber tube is then passed into the space of Retzius to take care of any bladder leakage in this region. The drainage tube for the bladder containing the thread for the radium needles is then turned downward and sutured to the skin with silkworm gut. (Fig. 8). Next, the recti muscles are brought together with sutures of plain gut, the fascia is closed from above downward to the drainage tubes, and finally the skin is sutured with silkworm gut. (Fig. 9). Generally, a week after operation the

drainage tubes and skin sutures may be removed and a special apparatus fitted to the patient to take care of the drainage from the bladder and permit the patient to leave his bed. (Fig. 10).

### Roentgen Therapy Continued.

About 2 weeks following the operation, or 3 weeks after the preliminary Roentgen therapy, further Roentgen treatment should be given. The high voltage rays are used again exactly in the manner described above. Then, at the end of a month, another series of Roentgen treatments should be given. The total Roentgen hourage amounts to 21 in the average sized pelvis, less in the smaller, and more in the larger.

### Conclusions.

(1.) The history of the technic of the treatment of cancer of the bladder by means of surgery, electrothermic coagulation, radium, and Roentgen rays is stated together with the results obtained with this technic in the hands of a recognized authority.

(2.) The diagnosis of carcinoma of the bladder is briefly reviewed.

(3.) The technic of the treatment with surgery, electrothermic coagulation, radium, and Roentgen rays is described.

(4.) The results of the treatment appear to indicate that the plan of treatment used is rational and is probably the best that has appeared to date.

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## DISCUSSION.

**Dr. Jacob Roemer:** Dr. Stevens presented his subject in an excellent manner. The method which he described is the very best, although it often is difficult to get patients to submit to such operative procedure and radiation. I have had no experience with coagulation of bladder tumors, my experience being entirely limited to radiation only, and radiation following operative removal of bladder tumors.

In the last 3 years I have treated 6 cases of carcinoma of the bladder with Roentgen rays only, using a high voltage of 215 KV. filtering the rays with .75 mm. copper and 1 mm. aluminum. Fractional doses were given in daily sessions for 30 days, through 4 large portals of entry so that the sum total amounted to an erythema dose (1400 R-units) at each portal of entry. This gave a homogeneous distributed depth dose of about 110% of the erythema dose. Two of those treated has moderately advanced cases of carcinoma of the bladder and were not benefited at all. In 4 cases good results were obtained; these patients are alive today and clinically free of symptoms.

The slides which Dr. Stevens exhibited of the various superficial malignant lesions show beautiful results. I doubt whether one can compare the results obtained by electrocoagulation of malignant lesions of the skin to those of the bladder. Supposing a new growth in the bladder were morphologically the same as that of the skin, one could hardly hope to get the same results in the bladder as on the skin. The physical and biologic conditions in both cases differ materially. The skin is far more accessible to heavy radiation than a deep-seated bladder tumor. If the results by the method Dr. Stevens described should be the same on bladder tumor as on a skin tumor it would be indeed wonderful.

**Dr. C. R. O'Crowley:** First of all, I shall illustrate my discussion with some slides. I am going to tell you a little experience about carcinoma of the bladder in a little over 100 cases, and I think I will tell you something very interesting.

This has been the most discussed and the most distressing subject in urology; it is a subject of despair. The pathologists themselves are entirely mixed up on this subject, for the simple reason that they in former years have had a little piece snipped off through the cystoscope and sent to them; which means absolutely nothing. Even a gross section that has been excised and sent to them has proved insufficient, and they have had to go inside before they could diagnose it as carcinoma of the bladder.

Potentially, all the types of bladder tumor are malignant. Of course, radium and x-ray have done considerable good work, but the results, I must say, are no more than clean surgery has given in the past. I have had many cases with Dr. Barringer, of Memorial Hospital, New York, who is probably the biggest exponent of it in this country today. The patients are all buried; it did not prolong their lives any more than is shown by the statistics of those cases in which clean surgery was done. I have 4 to 5 patients that are alive after 5 years, who had nothing else done to them but bladder resection and cauterization.

Doctor Stevens showed carcinoma of the bladder here; then he showed some superficial carcinomas. That is perfectly true; I believe in radium and Roentgen rays for superficial carcinoma but not for carcinoma of the bladder, except for one reason, which I will tell you a little later.

You can make an early diagnosis of what you see, but always remember that the patient can come to you with carcinoma, presenting one symptom, and that is bleeding, and that is the terminal symptom of his trouble. He has had it years before he ever presented himself to you,—probably 8, 10 or more years. (The speaker exhibited a series of slides to show the difficulty of differentiating between benign and malignant tumors.)

How are you going to make a differential diagnosis in tumors of the bladder, between your benign and malignant types? I think it is firmly established today that if you see a tumor of the bladder rather small, and you figure you have seen it fairly early, the thing to do is to fulgurate that

mass, and if you don't have recurrences or cell implants in other parts of the bladder, you are dealing probably with one of the few benign papillomas that you occasionally see.

The operation described here, I do not like. I think the surgeon operating upon these cases wants the bladder completely stripped and almost lying out on the abdomen, because he does not know from a cystoscopic picture, which oftentimes is misleading, whether he wants to just go in, thermocoagulate that, implant seeds of radium, or whether he wants to do an extensive operation of bladder resection and possibly a transplantation of the ureters. Therefore, the operation that I like best is the one that Beer at Mt. Sinai does, where you strip the peritoneum up off the bladder completely, divide the urachus, and lift the bladder entirely out of the wound; then when you open the bladder, you will have perfect vision to see what you want to do, and can follow any procedure you wish.

I will say there is one very good thing in favor of radium and x-rays—radium stops hemorrhage. The Roentgen rays have stopped a good deal of pain. Radium gives patients more pain after they have had it injected or placed in them; there is a very profound anemia, there is quite a reaction which follows these applications, the patients look very sick the first 4 or 5 days, but usually it is not fatal,—they come back again.

There is one very interesting case I wish to tell you of, before I stop. About a year ago a Yellow Taxicab driver came under my service at the City Hospital, with a diagnosis of bleeding for the past 4 or 5 months before that. I cystoscoped him and found in the wall of his bladder a little papillomatous area. Under continuous irrigation, we were able to see it. He looked very badly. He had a blood count of 1,250,000 and his hemoglobin was between 25 and 30%. We transfused that man—couldn't think of operating at all—and through a cystoscope we implanted 3 seeds of one-third millicurie each into that area. The man immediately stopped bleeding. We kept him around the hospital for about 2 weeks; he didn't bleed any after that. He picked up; we built him up; we force-fed him, built him up as well as we could, and the man is back driving his taxicab today.

We don't think we established any cure in this man, but we do think that we stopped bleeding. He refused to let us observe him any more, but I feel we are going to see that individual again.

It has been very interesting to hear Dr. Stevens' reports and the thorough way he goes at these cases, because you cannot go piecemeal, you must go just as he goes, deep and bold; and I personally like the radium emanation seeds because I feel when they are planted in there, with the changing therapy and the dosage all the time, I like them better. I don't see any great hope for these patients. There is one other reason why I use radium more than everything else today; the lay people have been so educated and fed up with articles in the papers, that the physician and surgeon today has to use it for his own protection.

**Dr. A. Haines Lippincott:** We all recognize the distressing condition that is now being discussed—cancer of the bladder. It is my opinion that results in these cases are dependent entirely upon an early diagnosis. Many cases of tumor of the bladder have been diagnosed as cancer of the bladder, that in my opinion have been benign growths. I have frequently made a diagnosis by cystoscopic examination, of what I believed to be cancer of the bladder, which later responded to electrocoagulation. I have never seen cancer of the bladder cured by this method.

When attending a symposium on cancer of the bladder in any Urologic Society, we have so many different views by men who are skilled in the treatment of this class of cases, that it leaves one in doubt as to the best method of attack. I do believe that Dr. Stevens has been able to show us a method of handling some of these cases that will be of great benefit to us in the future, but I also believe that the surgeon is coming into his own in these cases. Dr. Coffey, with his method of transplanting the ureter, and later a complete extirpating of the bladder, will have advanced surgery of cancer of the bladder to a great extent. I look forward with hope to rapid strides in the development in the technic of the surgical treatment of these

cases. However, any method that holds out a ray of hope in these distressing cases is welcome.

I know that all these tumors of the bladder are potentially malignant, and agree with Dr. Stevens that to date the idea of destroying these growths by fulguration holds out the greatest hope to the patient.

The message I have to give you is this: That an early diagnosis made at the **beginning** of hematuria is the one chance for cure.

**Dr. B. E. Kaplan:** The amount of bleeding in tumors of the bladder, I believe, is no indication of the involvement or the seriousness of the condition. The case described by Dr. O'Crowley, of the enormous hemorrhage of a patient who presented himself, a driver, that was relieved by radium, may not have been so serious as it seemed from the hematuria observed at that visit.

Now, Dr. Stevens here today reports on a combination of methods—surgery, x-ray, radium and fulguration—and shows very good results. The question is: How long do these results last? I have seen and worked on patients who presented themselves with an alarming hematuria, that was checked after one fulguration and never appeared again; that is, I wouldn't say "never" but for years the patient did not have any trouble with that bleeding or with his bladder. Again, a patient would come with very little hematuria and we would have to try all the other methods. I have often tried the surgical method first, then fulgurating the growth—just the reverse of the plan Dr. Stevens used; that is, he says fulgurate first and then excise the tumor. We got results in some of the cases, and in others we did not, or only temporary results.

I agree with all the speakers, that it is very hard to diagnose cancer even parthologically. Very often we send out a specimen of the growth and the report returned is, that the pathologist is in doubt as to whether it is benign or malignant. If we get a part of the lining with the growth, that will help the pathologist to make his diagnosis, but otherwise he is very often in the dark as to the diagnosis of the tumor himself.

I believe resection of the bladder in very large growths to be a very good method, and, of course, the first thing, as Dr. O'Crowley said, is to put the bladder at rest, and this can only be done by transplanting of the ureters. If you put the bladder at rest and resect the growth, you will have better results than if you resect the growth and leave the ureters in place.

Very often patients come with multiple growths. I remember distinctly seeing a man 2 years ago, who had multiple growths removed, diagnosed by the laboratory as malignant. First the growths were all excised and then they were touched up with the largest size button for fulguration. This patient has not been seen again until 2 or 3 weeks ago, when he came to the office complaining of hematuria and frequency. All that time, for 2 years he was perfectly well, as he said. So, of course, all the 4 methods we use are good, combined or separate, but it all depends upon the growth itself and the patient, as to what the future will show.

**Dr. Irving Lerman:** First I would like to congratulate Dr. Stevens upon his results. When we come to consider the question of carcinoma anywhere in the body, and in the bladder in particular, when we are dealing with a question as serious as that, and a man can report such splendid results in his cases, he must be congratulated upon his methods.

My personal experience has been rather in the line of showing the hopelessness of the prognosis of carcinoma of the bladder, and I talk now of personal experience not only in cases that I operate upon—for we fortunately are in the Metropolitan district and we have some of the men like Dr. Barringer, who has probably had as much experience with carcinoma of the bladder and radium application in it, as any one in the United States, and a number of my patients have been sent over there,—and I must say, in spite of having Dr. Beer see them, Dr. Keyes and Dr. O'Crowley, that I am almost hopeless about carcinoma of the bladder.

However, no matter how hopeless the prognosis, we must not say to



the patient, "There is nothing to be done," and we must try what we think may offer any alleviation or cure. We are certainly justified in trying any method—fulguration, radiation, x-ray therapy and operation, in as serious a condition as carcinoma of the bladder, but a little discretion should be used. All of us who have operated upon carcinoma of the bladder and gotten poor results know the terrific agony the patient goes through after operation. Personally, if I had carcinoma of the bladder and had very little hope, I would rather die of uremia, without being opened, than be opened and go through that terrific, painful process that follows an unsuccessful operative procedure. For that reason, one must be very sure of his diagnosis and must also be sure of whether the condition offers any chance to the patient. For instance, we talk of carcinoma indiscriminately here. We know that infiltrating carcinoma is an absolutely hopeless condition, and it is next to criminal to offer a patient like that any hope by operation. I have seen some of the best men in the country open up an abdomen and feel an infiltrating carcinoma, and not go any further.

Now, as to our diagnosis, it does seem simple to snip off a piece and give it to the pathologist, but whoever has had experience knows how difficult the diagnosis is. Unless you get a section that involves the base of the growth, you practically have no hope of a diagnosis.

Whenever there is a Urologic Society meeting presenting cases, it is worth while noting that such a hopeless tone is taken by all the speakers that one is discouraged. However, the procedure that seems to offer the best help is, when one gets a small carcinoma of the bladder—and I think it is pretty well agreed that when carcinoma occupies one-quarter of the lumen of the bladder it should be let alone—but when one gets a smaller one, try fulguration. If 2 or 3 applications of fulguration do not yield any results, one is pretty certain that the growths are malignant. Then I think these growths ought to be treated like carcinoma of the body anywhere. The one best method is operation, and an operation by just cystotomy, I am sorry to say does not, in my opinion, offer the patient the chance afforded by real resection of the bladder. If you want real resection of the bladder, you must not do it the same as you do a cystotomy, but by the technic where the bladder must be liberated and pulled out of the abdomen, the same as you pull a gall-bladder out, before you open it, to give you any chance of resection. We open the bladder after it is liberated, and if we can resect that growth, I think that ought to be done. Following that, or even preceding that, we can cauterize the carcinoma and implant radium into the bladder.

I want to say, in conclusion, that we ought to be very careful about opening carcinoma unless we feel there is a reasonable chance of success, because when we fail, the pain and the suffering of the patient is terrific.

**Dr. J. Thompson Stevens:** There have been so many questions raised here, that it is impossible for me to take each up separately. First, however, I wish to express my appreciation to those who have so graciously entered into the discussion of my paper. As you know, the discussion of one's paper is often the most interesting and instructive part of any program and I feel sure that you will agree that the discussion today is no exception.

No one has presented any cases treated by the combination of methods suggested, also no such results as those reported have been obtained by other methods of treatment in the hands of those who have discussed my paper. This is, of course, the strongest recommendation for the plan I have outlined.

Whenever a patient presents himself that case must first be classified; is the condition clearly localized, is it questionably localized, are there unmistakable signs of metastasis, is the case hopeless, or is the case one of recurrence. The first 2 classes are suitable for the complete treatment advised; the third group should be treated with the Roentgen rays only, unless this treatment puts the case into groups 1 or 2; the fourth class is treated for palliation only. One patient in the fourth class treated only by Roentgen rays, lived 2 years with no bladder symptoms, and finally died of

pneumonia. The fifth group, the recurrent ones, must be treated according to above classification.

Year after year, during cancer week, we physicians ask the public to consult us earlier with their malignant or premalignant lesions. What happens when they do come early? We apply one method of treatment, then wait. If they get a recurrence or metastasis we do something else. Finally, when the patient is too ill for the older methods of treatment, radium therapy is advised; later when the case is still farther along Roentgen therapy is advised. This plan of treatment has got to stop if better results are to be expected. The time to treat a patient, from the curative standpoint, is when the lesion is localized and when the patient is in good general condition. This is the time to give the complete treatment advised. If it is given properly in these early cases you will get the results here reported; by the piecemeal method just described failure will be the rule. In any carcinoma of the surface, or one that can be made superficial, such as that of the skin, the cervix or the bladder, the treatment described in detail in my paper should cure not less than 90%, providing the patient presents himself when in group 1; about 45% of group 2 will recover; while in group 3, 4 and 5 recovery will be the exception. All this points to just one thing, and that is, get the patient early and then apply the most thorough treatment that is possible.

Radium emanation seeds were mentioned by someone. They are, of course, necessary where large numbers of patients are to be treated. However, the experience of men who have used both the elements and the emanation indicates that the element is to be preferred. Some of you have no doubt seen the sloughs caused by emanations and have noted the agony caused by these sloughs. With the element properly used there are no sloughs and pain is relieved or stopped. My friend, Dr. William L. Clark, of Philadelphia, is admitted by everyone, I think, to be one of the best radium therapists in the world today. He went to the expense of having his radium put in solution and bought an expensive radium emanation outfit. After using it he has had his radium retubed and is again using the element exclusively. However, whether one uses radium emanation or radium element he must remember that it is impossible to cure any case of malignancy of the metastasizing type with radium alone. If you will take 1 mgr. of radium or 10 lbs. of radium, which, of course, is an impossible amount, and make some physical measurements under therapeutic conditions with an electroscope you will discover that it is impossible to get a destructive dose of the rays 4 cm. away from the applicator, no matter what the amount of radium used.

In closing, I again wish to say that thoroughness in the treatment of carcinoma early in the course of the disease, generally by combined methods, is the only hope for the majority of cases.

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## THE CAUSATION OF CHRONIC JOINT DISEASE.

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Our consideration of this subject will be confined to those forms of chronic joint disease due to metabolic conditions in the body and not to any specific cause such as tuberculosis and syphilis.

The successful treatment of metabolic joint disease consists in the discovery of the cause and in its partial or complete removal.

It will be necessary, therefore, at the outset to review these causative factors before we can provide a suitable remedy. The etiologic factor at the bottom of the trouble is usually infection, the chief sources of which are the teeth, tonsils, head sinuses and cavities, gall-bladder, appendix and colon.

Infected teeth should be either filled or extracted. I feel very strongly, however, that in the past there have been a great many good serviceable teeth removed without due and proper consideration; therefore, judgment should be exercised before subjecting a patient to the loss of these essential organs of mastication. Every orthopedic surgeon has had cases in which the removal of decayed and infected teeth has given brilliant results; on the contrary, we also have seen patients suffering from chronic joint disease who upon the advice of one of their previous physicians have had all their teeth removed, many of which were sound, and, of course, no material improvement in the patient's condition resulted. The question of pyorrhea requires much careful consideration and good judgment; this affection should be treated by a competent specialist if the teeth are to be saved. In many cases in which there is only a moderate pyorrhea with good drainage, no apparent deleterious systemic effects are noted; on the other hand, I am confident that we have all seen patients in whom one apical abscess has evidently been responsible for serious bone or joint infection, and in which prompt removal of the tooth and cleansing of the abscess has resulted in speedy and complete recovery.

Infected tonsils should be removed. Frontal sinus and antrum disease should be handled by a specialist.

As metabolic arthritis is probably the most common form occurring in adults, and possibly is the least understood, it behooves us to give special attention to its treatment. Although this form of disease is most frequently seen in adults it is by no means confined to them, but is occasionally seen in children, in all stages of its development. In metabolic arthritis there is first the acute active stage, and it is during this period that the disease is most amenable to treatment; if the patient receives popular attention at this time we can give the best prognosis. Then comes the sub-acute or more advanced stage, and finally, the chronic and quiescent stage of deformity, during which there is little or no pain, and little or nothing can be done for the patient, but he is left badly crippled and in many cases almost helpless.

Endocrine dyscrasia, alone or complicated with focal infection from the colon or elsewhere, is frequently at the bottom of metabolic disorders, and this phase of the subject must be given careful attention. We speak of endocrine disorders and blame the en-



docrine glands for failure to perform their functions of preventing toxemia by keeping the food sweet and in proper condition for assimilation, when in reality the endocrine glands have been working to their utmost capacity, in spite of overwhelming infection from one or more foci. The joint disease may be of metabolic origin complicated with a mucous colitis, where we have a combination of glandular deficiency and toxemia. The defective digestion and assimilation cause alimentary toxemia, and many of the symptoms of mucous colitis show the seriousness of the alimentary poisoning. A common manifestation in chronic cases of years standing is adrenal insufficiency not only manifested by general weakness, poor elimination of wastes, subnormal temperature, poor circulation and reduced blood pressure but particularly by lack of muscular tone in the alimentary canal. These cases usually have colonic ptosis and enlargement of the lower bowles, as shown in the radiographs.

We know that in all forms of toxemia overstimulation of the adrenal glands may result in a condition of hyperadrenia and sympathetic irritability which may even simulate a hyperthyroidism with its sympatheticotonus and intermittent palpitation of the heart. The treatment of such a case is to remove the toxic condition by clearing out the colon and at the same time give endocrine sedatives to lessen the palpitation and treat the adrenia.

Taking the life history of the patient should be thorough and searching, going back to early childhood; for instance, if a patient gives a history of more or less chronic intestinal trouble, whether it be diarrhea, constipation or only occasional gastro-intestinal upsets, this will be sufficient to draw the practitioner's attention to the gastro-intestinal tract, and in many cases the site of the trouble will be found there. An abdomen which is painful upon moderate pressure needs treatment and, ruling out the acute infections like appendicitis and cholecystitis, should certainly not be passed over lightly when one is searching for focal infection. The gall-bladder should be carefully examined for infection. This does not necessarily mean operation; in the absence of gall-stones, medical drainage is very popular at the present time. In my joint cases due to infection, I am making a careful comparative study as to the frequency of gall-bladder and colon infections as causative factors and thus far I am much impressed with the far greater frequency of colon infections.

We have the great advantage in colon infection that it is possible to gain direct access to the organ and wash it out as often as necessary. It has been my experience that the colon is very frequently the seat of chronic infection and the direct cause of a large proportion of the cases of chronic arthritis. The colon is an

infectious organ and should be handled without gloves, inasmuch as it causes more infections in bones and joints than all other infective foci combined. For years I have realized the menace of the colon as a source of infection, but the ordinary rectal tube, 15 inches long and of small caliber, was entirely inadequate to cope with the situation. In many of these cases there is atony of the colon and it is that which actually requires treatment. For the time being we must dismiss from our minds the swollen and painful joints and direct our attention to what lies back of this manifestation—the real cause of the disease.

Colonic atony has for years been recognized by the internist as a medical entity and has been treated by drugs and diet with little success, but as far as the writer has been able to ascertain, the important part played by an atonic colon as an etiologic factor in chronic joint disease has not been given much thought. The colon has a muscular coat, the function of which is to keep the waste matter in the intestines moving on. If, owing to improper and rapid eating, the colon gets sluggish and waste material does not move along properly we are going to have, sooner or later, an impaired organ with the inevitable result, the formation of inflammatory products and toxins. The lining membrane of the colon becomes coated with mucus, fibrin, cocci and other inflammatory products or agents, including eventual bacterial invasion of the mucosa, and as a final consequence the muscular coat atrophies. The most effectual way to remove the toxic coating, together with the other inflammatory products, from the lining membrane of the colon is by frequent irrigation, and the way to increase the muscular tone is to cause the colon to exercise itself.

If we pass a colonic tube of sufficient length and size through the colon we accomplish both these objects. The organ is thoroughly flushed out and as soon as the rubber tube is introduced the colon at once tries to expel it, and thus exercises itself and increases its tone. By repeating this process daily for a sufficient length of time we secure a colon with a healthy, active lining membrane free from infection and with a strong muscular coat having a good tone.

The colon irrigations should be given daily for the first 3 or 4 weeks; after that they should be given at least twice a week. In my experience, these patients have made the quickest recovery who have had daily irrigations; in other words, the more thorough the mechanical cleansing at short intervals the better the outlook.

The laboratory work is important. After the first irrigation the report of the pathologist helps to determine just what solutions shall be used for irrigation. An alkaline stool needs an acid anti-

septic and an acid stool requires an alkaline solution; while for a spastic colon a colloid silver solution should be used. After a number of irrigations have been given and the colon has been sufficiently cleared of fecal matter, and after the laboratory reports have been received, if there is a low count or absence of *B. acidophilus*, these germs are implanted in the colon after each irrigation. I feel that this organism is important and that a patient who shows a high acidophilus count (40%-50%) represents much more favorable conditions on which to work than one whose feces show few or none of these bacilli. Implantation of acidophilus changes the intestinal flora; it has for its purpose killing off the pyogenic organisms and prevention of their growth. The *B. aërogenous capsulatus*, as you know, is really the Welsh gas (anaërobic) bacillus, which causes fermentation, and by increasing the acidophilus these micro-organisms appear to be successfully combated; therefore, I have found a low acidophilus count to be an indication for further treatment. In our laboratory, we have grown cultures of acidophilus and have found that streptococci will not grow on a medium where there is a fair amount of acidophilus.

A patient with septic arthritis usually has a low percentage of hemoglobin and a low blood pressure. These patients also have a low alkaline reserve and therefore, as collateral treatment, I use colloidal lime and preferably by the intravenous route. Of course lime may be administered by the mouth but in my experience the intravenous method has been much more effective. Iodin is so often deficient in these cases that this drug has been added to the lime and introduced directly into the circulation whenever there was evidence of hypothyroidism.

In casting about for treatment, in any particular case, we must not let any stone remain unturned. Each case must be considered as an individual problem. All the foregoing conditions should be carefully considered and looked into for possible sources of trouble. The use of vaccines is very important but they must be properly prepared from carefully selected antigens. It is not sufficient to simply isolate a particular organism; it must be the right strain of that organism. This is determined by the complement fixation test and we do this on practically all patients. My pathologist, Dr. Otto Lowy, keeps from 20 to 30 different antigens made from different strains of the common organisms. Very debilitated patients and diabetics do not stand vaccines well, and for them vaccines if used at all must be used in minimum doses. Reactions should be avoided as much as possible, and after a reaction never increase the dose of vaccine even if the same dose has to be repeated 5 or 6 times.

In treating these cases one should be ever mindful and on



the look out for foci of infection. This search for foci has been very materially aided during the past few years by the work of Hastings (J.A.M.A., April 19, 1913.) Herding, (Dental Item., Jan., 1919) and other workers. Recently Burbank and Hadjupoulis have written in detail in reference to the method, (J.A.M.A., Feb. 28, 1925). As the colon is such a common seat of trouble and comparatively easily reached, I clear that organ out first and as this take from 2 to 4 weeks to do properly, I also utilize this time in looking for other foci of infection. This includes a complete radiographic study of the teeth and of the affected joints, blood counts, and complement fixation tests for all the more common bacteria. The complement fixation test is to ascertain if possible just what strain of specific organism is responsible for the patient's condition; knowing this it is but a step further to select the usual habitat for that organism. This then gives the clue and with the radiograph and other laboratory findings the foci may be located.

If there is one thing in my practice that has made a deep impression on me, it is the conviction that no one ever gets a chronic arthritis unless the general health is at low grade, nor have I ever seen permanent recovery until the general health has been raised to that degree which would be called health for that individual. My purpose in bringing this subject before you today is to call attention, in an especial manner, to the atonic colon and terminal ileum as a large factor in that type of ill health which conduces to arthritis. In my own experience recourse to colonic irrigations, properly administered, together with systemic treatment, and properly prepared vaccines made from carefully selected antigens, has resulted in far more frequent recoveries than under the old system of merely looking for and cleaning out suppurating foci.

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#### DISCUSSION.

**Dr. Otto Lowy:** Owing to the lateness of the hour, my discussion will have to be curtailed. I merely wish to emphasize some of the things that were said by Dr. Twinch and by Dr. Cotton, in his paper. One of the most important points was that one man cannot do all that is to be done. Medicine is such a large subject and so highly specialized that a group of trained men are necessary for the purpose of diagnosing and treating many of the conditions which were described.

In this particular field, for instance, we find anatomic and biologic changes. Drs. Cotton and Twinch seem to feel that the colon, the stomach, the gall-bladder, teeth and tonsils, are the chief offenders, because they harbor organisms which are inimical to the body. Therefore, if we wish to remove diseased conditions we must attempt to correct anatomic defects, which lead to physiologic defects; we must also recognize and remove the pathognomonic organisms which are responsible for diseased conditions.

Unfortunately, vaccine therapy in the past has fallen somewhat into disrepute because of our failure to properly use and evaluate vaccines. To illustrate: Streptococci found in the tonsils or teeth do not necessarily mean

that they are the offending organisms and unless the particular strain found, is the offender, injections of vaccines prepared from them are valueless. We have known for a long time that streptococci, as well as other organisms, may be morphologically and culturally alike but consist of a large number of strains, some of which may be pathogenic, whereas others are not.

As one result of gonorrhea, an individual may develop arthritis. Examination of prostatic smear may be negative. Drs. Schwartz and McNeill made use of the complement-fixation test for the purpose of determining the presence or absence of gonococci anywhere in the body. Some time ago Burbank and Hadjipoulis made use of the same method for the purpose of diagnosing arthritic conditions caused by pathogenic organisms. After obtaining a positive result with any one of the strains of streptococci, they used a vaccine prepared from the same strain and obtained very good therapeutic results. In conjunction with Dr. Twinch, I am now using the complement test as described by Burbank.

Solis Cohen and his co-workers have been able to show that an individual may harbor streptococci, but may have sufficient antibodies in the blood to prevent the growth of these organisms. Therefore in order to determine whether an organism found is pathogenic for the individual, they grow the organisms obtained from the nose, throat, teeth, tonsils, and stools, in the patient's whole coagulable blood. I have found in my work that some individuals give negative complement-fixation tests. When, however, the method described by Solis Cohen was used organisms were obtained and their vaccines gave excellent therapeutic results. Of course, much more work will have to be done along these lines before we can understand this particular phase of immunity.

In connection with colon irrigation, I should like to say that it is valueless to give a colon irrigation unless it is done properly, by means of a long colon tube, as described by Schellberg. The colon contains a large amount of mucus which must be cleansed out mechanically, and the only way to do that is by means of a tube.

**Dr. John N. Bassin:** This subject is clinically very well understood, and still I feel that Dr. Twinch ought to be complimented on the mechanical phase of this work. It occurred to me when I first heard this paper, at the New York Academy of Medicine, to wonder if we might not at last learn the exact origin of chronic joint pathology in question as being more or less bacterial or metabolic, or both. Thus far, down at the Long Island College Hospital, we have done a number of synovectomies to help determine this matter but as yet have failed to isolate bacteria that would give us any clue as to the exact origin of the joint disease, except the metabolic change and the disturbance in calcium distribution, which I think has been known since a time long past.

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## HAS THE DOCTOR LOST HIS GOLDEN RULE?

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JOHN HAMMOND BRADSHAW, M.D., F.A.C.S.,  
Orange, N. J.

These are days of great possibilities for the doctor. These are also days of magnificent accomplishment. But while living in an age of unsurpassed opportunity the doctor should remember his obligations. He is constantly reminded of his obligations to his patient, for if he forgets them there are certain swift and sure results. Most of these he cannot dodge. He may thrive for a time like the historic green-bay tree and perhaps for many years; and, in fact, his own particular green leaves may overshadow those of his more self-sacrificing competitor who is

more punctilious than he of his obligations. But if he neglects these, his green leaves will wither and sere and in time his place may know him no more. The doctor's relation to his fellow *medico* has a peculiar status.

It is easier for an astute but self-seeking politician to ride rough shod over the general mass of his constituents than it is for him to betray his obligations to his pals. In this, to the honor of the medical profession, it can be said that the doctor differs from the professional politician. The latter's pals know that if they do not stand shoulder to shoulder to the boss their chance of preferment will be slim indeed; in fact, they will soon find themselves in the limbo of the outer darkness of political obscurity. Now the pals of the physician are not the few satellites and other hungry fellows who are expecting their daily crumb. The pals of the honest doctor are all the doctors in his town, his county, his state and in fact his whole profession.

The profession of medicine is a big profession. It has a big past. It has big ideals. It has a record of big accomplishment. It has conferred genuine benefit upon the race. It takes second place to no profession for honest work, long hours of service, patient self-sacrifice in helping mankind in sore distress, and the path is strewn with the wrecks of its devotees. Somewhere it has been written that there are more old drunkards than old doctors. The profession of medicine is doing the work of the Master. Why should the members of such a profession ever forget that their obligations include themselves?

We often hear stated and see printed, sometimes on the "funny" page, that the doctor is a member of a *trust*. Would to God that this were true! We at times hear it said that there is no use in expecting a consultant, selected by the general practitioner, to differ from the latter in already made and stated diagnosis. This is a lie!

The richest man this country has ever produced, and who is perhaps as well the wealthiest man today in the whole world, who has accumulated millions by his wonderful ability and mechanical genius, in his recent book "My Life and Work" is either dead wrong and actually insulting to a noble profession or else should be hailed as its great Medical Reformer. Read what he says on page 216 of this most remarkable and most readable book: "Professional etiquette makes it very difficult for a wrong diagnosis to be corrected. The consulting physician, unless he be a man of great tact, will not change a diagnosis or a treatment unless the physician who has called him in is in thorough agreement and then if a change be made it is usually without the knowledge of the patient. There seems to be a notion that the patient, and especially when in a hospital, becomes the property of the doctor. . . . . Many physicians seem to regard the sustaining of their own diagnosis of as great moment as the recovery of the patient." And in another place



he says: "I am entirely convinced that what is known as professional etiquette is a curse to mankind and to the development of medicine."

Should we let this opinion prevail? If we do so it is our own fault.

Doctors handle their work better than they handle themselves. We all know the profession is an arduous profession. It is difficult for some to bear up under its strain. The rewards are often adequate to the industrious doctor, but this recompense should be and usually is secondary to the mental satisfaction and soul gratification that comes to him who obtains his results from faithful honest work. Yet, it takes a philosopher as well as a doctor to endure the contact with certain of his own profession; and this is all wrong. Working for our patients as well as for our own necessary physical existence, we should be humane enough to do *team* work. For we need each other's help. We should aid our fellow physician as well as our fellow patient. If our colleague has but a ragged dollar practice in an unfortunate locality we should delight in giving him a boost. If he has the greater ability and smartness, for the two are not the same, then we should be equally philosophic. If he is ill it should be a matter of delight and pride to keep him on his feet and again see him at his beloved work. If he be morally sick and after a temporary recovery returns like a dog to his vomit, he should be treated like a dog; but if he shows even the will and the effort to rise to higher things he should be supported, encouraged and lifted up until he can again be an honor to the most liberal of professions.

We have patients. We do not own them. They belong when sick not in our exclusive cupboard but to the medical profession as a whole. We should so work that no one can claim to do better or more conscientious work than we do ourselves. Many things enter into the situation. We are to consider heredity, temperament, environment early and late, different advantages in training, different grades of ability, industry, self disciplining and habits, pure good fortune, etc., so the subject is a complicated one. One is often in honest doubt as to the right course to pursue. But for us there is fortunately a guide and an almost unfailing solution to, or remedy for, the problems we find arising in our daily contact with our fellow doctor. If it has been lost, we should hunt up and find our lost golden rule.

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## THE YEAR'S WORK.

In this final month of the year it would seem fitting to review our work, to take an account of stock, and to consider what progress has been made in developing those functions of the society in which the journal office participates. As a subscriber, you have a right to expect an occasional report of proceedings and we take pleasure in presenting here a summary of the more important things attempted, though it is somewhat difficult to make such a report intelligible without seeming to transcend the bounds of a proper modesty.

During the year the Journal has changed somewhat in appearance, has taken on a new cover, which we think is an improvement in its dress, and has shown some distinctive improvement in typography; for this last credit is due to our printers.

The old established department of County Society Reports has developed into a really important feature. It has been possible to maintain throughout the year, with scarcely a break, the publication each month of reports of every county society meeting held during the preceding month, and, of still greater importance, these reports have come to possess a value comparable to that of the original articles published. Some of our reporters have shown exceptional ability and in recognition of the educational value of their material we have recently adopted a plan, suggested by one of their number, of indexing in the table of contents the significant features of such reports.

Experimenting first, in the January number, with a new department—Observations From the Lighthouse—as a substitute for the former method of submitting abstracts of medical literature, we have gradually instituted other special departments bearing upon some of the problems of our vocations or avocations; for instance, Medical Economics, Medical Ethics, and Esthetics. We were exceptionally fortunate in being able to induce two of the most eminent and versatile members of the so-

ciety to present monthly articles on ethics and economics, and we take special pleasure in acknowledging our debt of gratitude to them for so ably presenting these matters to their confrères; each article has dealt with some question of interest and of consequence to the practicing physician. Neither of these gentlemen has yet given permission to use his name in connection with the articles published, but the articles themselves have been of such high quality as to carry through without the aid and influence of an author's name.

The journal is not a self-supporting institution but its cost is met to a large extent through the sale of advertising space, and the fact that its income approaches expenditures as nearly as it does is due entirely to the labors of the hard-working Chairman of the Publication Committee, Dr. Bennett; he has carried this whole burden single handed and only those who have had experience of that kind can fully appreciate the extent of his work and the degree of success attained. The society certainly owes Dr. Bennett special thanks for the financial success of this journal.

As has been indicated in other editorials and reports, the educational program appears to be developing satisfactorily. This portion of the society's work is the most time consuming and presents the least visible results, but if we may judge from the amount of newspaper publicity secured and from the occasional messages received verbally and by letter the effects are all that could be reasonably expected. The leading newspapers of the state are publishing our radio health talks in full, and are thus supplementing our efforts to reach a large proportion of the public with advice relating to the possible prolongation of life through the preservation of health. Furthermore, in each of the towns so far visited through coöperation with the Rotary and Kiwanis Clubs the local papers have kindly given, unsolicited, considerable space to the subjects discussed.

Through the papers and at one largely attended Parent-Teacher's Association meeting we have also participated in the campaign to limit the invasion of small-pox in this state. Antivaccinationists have been quite active in some parts of New Jersey but we are ready to meet the issue at any time by presentation of facts regarding the efficacy of vaccination as a defense against this dreaded disease.

At the instigation of the Editor, an Interstate Conference was recently called for the purpose of considering in what manner and to what extent the medical societies of New Jersey, Pennsylvania and New York might coöperate in educational matters and in the procurement of uniform medical legislation. The Presidents, Secretaries, Chairmen of Legislative Committees and Editors of these three societies, and the Secretaries of the respective Boards of Medical Examiners, were invited to confer, and the first meeting, held at Atlantic City November 7, gives promise of being the original step in a movement that may have far-reaching results. As was anticipated, it was found that the problems



confronting the profession in these states were almost identical and it would seem that by united efforts satisfactory solutions of such problems may be more readily devised and effected. In some instances one state is a bit further advanced than another and the latter may be able to profit by the former's experience. Of greater import, however, will be the effort to secure uniform laws for this district in which state boundaries are a question of geography rather than of practical utility.

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### ARE WE PREPARED?

We announced some time ago that, coincident with our talks at county medical society meetings, in developing the campaign for adoption of periodic health examinations, we should carry on a plan for public education in this matter by appearing whenever possible before lay organizations. With that end in view, we sought engagements with Rotary and Kiwanis Clubs, as community gatherings of representative men, and we have reason to believe that the results of our appearances so far have been very satisfactory. Every audience addressed has seemed appreciative of what we had to say, very glad to learn more of the physician's interest in preventive medicine, and rather inclined—though here we have as yet to judge solely from personal remarks after the lectures—to consider and possibly act upon the advice to consult the family physician for a personal health inventory and to adopt the habit of periodic examinations.

We would not say that the public has evinced more real interest in this matter than have our professional audiences—the public needs to have more concern in the question, for it is one of vital importance, and, it is possible that we have been able to present a more appealing exposition of the subject to these groups—but we have felt at times doubtful whether the message to our members was “getting over”, was really “sinking in”, was stirring them into the activity desired.

While pondering on this problem, there came to our desk a letter from a Kiwanis Club member which deserves the thoughtful consideration of every member of our society, as well as the attention of your representative in this work. We quote the principal part of that letter, as follows:

“I have your letter of November 6, addressed to me as Secretary of the Kiwanis Club, in which you seek an opportunity to present the subject of ‘Periodic Health Examinations’ to that club. I feel inclined to consign your letter to the waste basket at this time rather than turn it over to the Program Committee. The reason why I feel that way is that it has been forced upon me that there is a greater demand now for periodic health examinations than there are physicians who are prepared to give such examinations and I feel that the place for propaganda work along this line is in the medical profession. \*\*\*\*\* I know of people who went to their family physician seeking a health examination and were

either put off or given a most perfunctory examination, which even the patients recognized as being far short of their understanding of a health examination."

The author of that letter has properly raised a very important question and it behooves us to inquire as to the extent to which his criticism is applicable to the profession at large. We do not understand him to imply that the criticism applies to the entire profession in New Jersey, but to insinuate that it does apply to a certain percentage of our members. Is that percentage large or small? We cannot expect every practitioner of medicine to be versed in the technic of these examinations as yet, since the whole scheme is of comparatively recent origin, but it is not too much to expect that a licensed regular physician shall be competent to conduct such examinations and that he shall do the work thoroughly if he undertakes it at all. We believe that the above mentioned criticism has grown out of carelessness on the part of some examiners and not out of ignorance on their part. However, even carelessness in such an important matter, if attributable to any number of the members of this society, would be inexcusable.

The state medical society has recognized periodic health examinations as an important factor today in preventive medicine. We have expressed the belief that if properly and adequately applied this one measure would aid materially in raising the average duration of life in this country. We protest against organizations under lay control directing or conducting such examinations. We proclaim on every possible occasion that this work belongs properly in the hands of the family physician. But, are we, as individual family physicians, doing our full duty in the way of preparing to meet the growing demand for this work?

In the November Journal, we announced our readiness to supply members with some of the essential equipment for conducting and recording these examinations. Some of our members very promptly sent in orders for Guide Charts, Manual of Instructions, and History Blanks, but we should like to hear at once from a very much larger number. Incidentally, to secure prompt response to your orders, please address them to the Editor (not to the Publication Committee) at his Atlantic City office, where such supplies are kept.

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#### THE RADIO PROGRAM.

We are very glad to report that our efforts at broadcasting information relative to the periodic health examination campaign have been most graciously received. Up to date, six of these "Ten Minute Talks On Keeping Well" have been sent out from WHAR, Atlantic City, on Thursday evenings (7:30 p.m.) and while we have no means of estimating the number of listeners, we have been led to believe the talks are proving effective, and we have been much gratified by the fact that a number of newspapers throughout the state have been regularly publishing this material in its complete form.

## Medical Economics

### RESEARCH AND THE PRACTITIONER.

"The nature of the early symptoms and the prognosis of disease are amongst the least understood matters in medicine."

*Mackenzie.*

Research work in medicine is almost entirely done by the specialist in some branch either of medicine or surgical practice, or the specialist in pure research, i. e., the laboratory man. The general practitioner as a rule regards research as something to be done by the more highly trained, and as something for which he himself has little or no opportunity.

Considerable valid argument may be advanced for this state of affairs. The specialist has a better ordered, more routine day at his disposal. He is not subject to the whims and vagaries of general practice. Given the desire he can take a certain amount of time each day for the research task he has assigned himself. Time in any quantity at all never belongs to the general practitioner; at any rate he soon grows to feel that it does not, and, if his ambition turns toward the working out of some problem, he sooner or later becomes discouraged, because his time for work at the set task is so scattered and interrupted as to make it a matter of years rather than months to attain to a given objective. To few men is granted the patience and ability to concentrate their interest for long enough to meet such conditions of work. There have been and are notable exceptions.

It has been pointed out previously in this column that the intellectual achievements of the general practitioner, and his intellectual capacity, are frequently as great if not greater than that of specialists in other fields. His *specialty* is the practice of medicine, the most difficult of all specialties, and if he has a desire to do research work he

should look for problems adapted to his field. The laboratory man has so long held sway in the research field that the impression has grown in the last half century that all research should be left to him since he can devote his entire time thereto. For the type of work at present undertaken in the laboratories and hospitals this is undoubtedly true; but the question may very properly be asked: Are these the only types of problems which need to be worked out? or—Has the general practitioner any field for research peculiarly his own?

In dealing with research problems connected with disease it must be clearly recognized that disease of any kind as seen in the hospital is always, whether it be acute or chronic, in a fairly well advanced condition. As medical journals and text books are scanned it is clear that full blown and terminal conditions are usually under discussion. The surprising lack in our study of disease is in efforts to clarify its incipient stage. This is especially true of chronic disease. Such cases do not come to the hospital till long after their trouble has begun—months or even years—and during all that time it has been the general practitioner who has had the opportunity to study them and watch their invalidism develop.

Mackenzie called attention twenty years ago to the need for the study of early symptoms and pointed out very clearly the duty of the general practitioner in this respect. Anyone who will read Mackenzie's "Symptoms and Their Interpretation", must gain a considerable stimulus for this sort of work.

Accurate observation and the keeping of careful notes are prime essentials for this type of work,—then patience and the will to wait over a long period of months or years till sufficient data are collected. Such symptoms as pain, fatigue, headache, slight degrees of indigestion, are a few that will readily suggest themselves as often con-



stituting the first and often for a long time the only complaint of a patient. The observation of such cases, and careful record of what becomes of them, will in the long run repay the individual observer, but more will repay the profession as a whole in the mass of data that would ultimately accrue if any considerable number of general practitioners would lend themselves to such work.

Early symptomatology is of utmost importance if preventive medicine is to advance as it should, and the only one with opportunity to attack the problem is the general practitioner. It remains for him to waken to the realization of his duty toward medical science and to seize the opportunity which is within his grasp.

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## Medical Ethics

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### FEES.

"The laborer is worthy of his hire." No exception can be taken to such a statement, nor to the corollary that the payer is entitled to services commensurate with the cost. We have witnessed, in the last few years, in the labor world a greater appreciation of the value of labor, skilled and unskilled, and a corresponding increase in the wages paid to workmen. However, much we may question the methods of laborers and their union organizations we must be impressed by the results obtained. It remains to be seen though whether higher wages will prove to be the panacea for all the workmen's ills. Thrift and prudence in spending money is a surer way to accumulate a store for protection against hard times and it is the lesson of experience that rapid acquisition of wealth does not lead to habits of industry and economy, but rather to those of idleness and wastefulness.

However, we are not writing a homily on the labor question. What interests us is the adjustment of medical fees to the

great increase in the cost of living,—labor, food-stuffs, and commodities of all kinds. That professional fees have risen during the past few years must be admitted and without hesitancy or excuse because, since the purchasing power of money has been so considerably reduced a great injustice would have been done were this not so.

No hard and fast rule can be made governing the fees that physicians shall charge. So many elements enter into the case. The location—whether in city or country; the patient—whether poor or rich; the station in life of the patient,—his value to his family, city or state or influence or worth in manufacturing or business field; the illness—whether mild or severe; all these factors should have weight in determining the charges to be made.

Of course, it will be argued that life is as dear to one as another, and that good health and physical vigor are appreciated by all. Just as much skill and ability, too, are required to care for the poor as the well to do but the responsibility of the attending physician or surgeon increases as the station in life, wealth, position or influence of the patient rises. There was a time when the college issuing diplomas also arranged the schedule of fees and our County Societies, whether to avoid discrimination or prevent contests over the same, also arranged a scale of prices, but the rapidly changing condition of the people with regard to wealth, and the demands and exactions imposed upon physicians have made necessary a revision of our ideas to the proper return for professional services. Office expenses, a working library, laboratory examinations, necessity for post-graduate study have added to the cost of keeping abreast of the times, and what would have been a proper charge a few years ago would be an unfair one now.

What, then, are the proper charges to make for medical advice, surgical operations and consultations? It might seem simple enough to charge for services ren-

dered, basing the value of such services on conditions already stated, together with the time and study and preparation for a work demanding the best that is in us.

Complaints are sometimes made by medical men that surgeons are better paid for their work, but it must not be forgotten that the responsibility is nearly always greater in operative cases, that the anxiety does not end with the performance of the operation. Complications, trying and difficult, may arise and surgeons are held more directly responsible for the cure and permanent restoration to health than are medical men. True, there are phases of medical practice that have always seemed undervalued and underpaid. Obstetrics, now-a-days, when the prenatal care demands time and attention, and the degree of skill in the management of labor demands that one be well qualified to engage in the work. The management of a case of pneumonia or severe typhoid fever or cerebral meningitis calls for the possession of knowledge and ability quite as imperative as that of the average surgical case. Where patients are ill of diseases which may prove fatal, when the correct diagnosis involves special study, and the use of laboratory and other aids, when such illnesses occur in those whose lives are indispensable to family, business or government, the physician bearing such responsibility should be well rewarded for his services.

There is, however, a growing tendency on the part of a minority of the profession which must be referred to and discountenanced. I refer to charging big fees in an effort to establish a reputation for efficiency or skill, or, as is not infrequently done, exacting large fees for minor surgical operations that may come under the head of specialties. Of course, the saving of sight or hearing, or restoration of function of a crippled limb, or relief of long standing and incapacitating pain, all of these measures implying special and unusual skill are to be well paid for. But minor ailments and dis-

eases without mortality, and operative measures without risk, should not be considered in the class with the more serious and desperate cases, while the application of questionable remedies and methods are to be discouraged and frowned upon as reflecting a commercial and mercenary spirit unworthy of the medical profession.

Physicians and Surgeons are only entitled to fees commensurate with the time and skill and responsibility involved in the management of the case.

OBSERVANT.

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## Esthetics

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### HEALING IS THE GREATEST OF ARTS.

(From the Newark Evening News,  
Nov. 11, 1925.)

What is the greatest of the arts?

"Music", cries one, "because it speaks the things which each of us feel, but can not express. A violin in the hands of a master can cry out the sorrows and the joys that die in the throats of us. Music is the greatest of the arts because it speaks, far more beautifully than human words, the language of love."

"I say painting is the greatest of the arts", declared a second. "Painting places before the eyes, 'the windows of the soul', the glory of light and color which music can not express. To see is to believe, and only through the alchemy of colors can the great beauty of the world be understood."

"Not so", asserts a third. "Poetry is the greatest of the arts. For poetry contains not only the music of all instruments, but it brings to the sensitive eye and heart more color in a single line than is contained in the frescos of a great cathedral. Poetry is the culmination of all art."

Poetry, painting, music. To one of these, it would seem, must go the crown. But I say the greatest of the arts is none of these,



but rather the art that is practiced by the physician—the art to heal.

There comes a protest that there is no beauty in medicine, in pills and vials and silver instruments.

In the signs of the profession—no, but in its tangible results a great shining beauty above and beyond the music and poetry of the ages.

In the newborn child, a living poem, made perfect through the art of the physician. In the wound that is healed, in the troubled mind made well. Beauty turning the maimed and the suffering back to beauty.

There is in this art every attribute of beauty of which music, painting and poetry may boast. But there is more. There is the appearance of an almost superhuman power that says to Death: "Stand back. Not until every art and energy that I know has been spent shall you step in." There is the beauty of courage and love, of strength and understanding.

If you have ever been so ill that pain has almost come not to affect, you know that the hands of a physician are poems, his voice a mighty music, his body the apparent glorification of divine resemblance.

Some one has portrayed a bearded physician bending over the bed of a child. One knows that death stands at the door, fearful to come in while yet that good man be not destitute of hope. And there are very few for whom impatient Death will wait.

That picture burns like a fire. For if the beauty and tenderness and courage that it expresses are not more powerful, more beautiful, more to be remembered than any poem or painting or song, one may doubt the weight of the words: "Inasmuch as ye have done it unto one of the least of these, my brethren, ye have done it unto Me."

This is inspired by one whose friendship has been music and painting and poetry to me.

## In Lighter Vein

### But You Need 'Em to Throw at the Loud Speaker.

I went to look at an apartment in a spiffy new building. "There is no built-in bookcase," said I, "nor do I see where my own bookcases would fit in." "Books!" said the sleek young agent, "why, madam, no one needs books these days, with the radio!"—Chicago Tribune.

**Strategic Silence.**—"You have been strangely silent of late."

"I have decided," answered Senator Soregum, "that the people do not like a man to talk continuously. It's better to permit the impression that you are taking time off to do a little thinking."—Washington Evening Star.

### The Enthusiast.

Jock's bagpipe playing was the one thing that mattered to him in life; it was a rival even to whisky and religion. One night, while he was strutting about the room, skirling for all he was worth, his wife attempted a mild and very belated protest. "Jock," said she, "that's an awfu' noise you're making." Jock sat down and took off his boots, then got up and resumed his piping in his stockingsoles.—London Morning Post.

### Forewarned.

The Garretts were at the breakfast table. "The funniest thing happened to me last night," giggled Majorie, the elder daughter. "Mr. Litton—Junior's school teacher—proposed to me. I told him he was an old fool for even thinking of such a thing."

There was a moment of silence. Then Junior rose abruptly from the table.

"Ma, I don't think I'll go to school today," he observed.

### Surplus Energy.

"Whaffo' yuh sit dere an' twiddle yo' thumbs?" demanded Liza angrily.

"Golly!" ejaculated her spouse, turning as pale as was possible for him, "Dat am waste motion, sho' 'nuff!"—Amer. Legion Weekly.

### Trials of an Editor.

Typographical errors and mistakes often seem extraordinarily funny to the great reading public, but in the office where they occur they seem more like tragedies. We recall that this old palladium of liberty, in an elaborate report of a Jewish wedding, once said that the happy pair were followed closely down the aisle by the officiating rabbit. That seemed very funny to the light-minded, but it did not seem funny to us, especially when the bride's father came to see us about it.—Ohio State Journal.



## Observations from the Lighthouse

*In these "observations", we aim to present each month a few suggestions for thoughtful consideration, and to offer such assistance as we may be able to render from this office to those interested in further investigating the topics submitted. We can deal with only a few subjects each month and will select those that have appeared most prominently in the scientific literature of the preceding month as original articles in the leading periodicals, and we shall not attempt to discourse extensively upon any subject, the object being rather to stimulate interest in the establishment of personal postgraduate reading courses suitable to the individual. If any reader of the Journal should find himself sufficiently interested in any subject discussed in these columns to desire further information, we shall be very glad to furnish an enlarged bibliography upon that question, and, if he wishes to procure ampler abstracts of the original articles quoted, or access to the complete original, we can put him in the way of obtaining that material promptly and at a minimum of labor and expense.*

### PUERPERAL ECLAMPSIA.

B. H. Alton and G. C. Lincoln (Amer. J. Obs. & Gyn., 9:167, 1925) writing with reference to the control of eclampsia convulsions by intraspinal injections of magnesium sulphate, report 4 cases so treated. After each injection the convulsions ceased immediately, but the minimal time in which complete control was gained was 18 hours. One patient was in a state of coma when admitted to the hospital and did not regain consciousness before death but the convulsions were promptly brought under control. The amount of magnesium sulphate recommended as a dose is 1 c.c. per 25 lb. of body weight; larger doses cause depression of the respiratory center. If the salt tends to induce respiratory embarrassment, 10 c.c. of a 25% solution of calcium chlorid may be given intravenously for its balancing effect.

E. M. Lazard (same journal page 178) reports a series of observations made upon the intravenous employment of magnesium sulphate for eclamptic convulsions, using 20 c.c. of a 10% solution as soon as possible after the first convulsion and along with other eliminative measures such as phlebotomy, gastric lavage and colonic flushing with glucose and soda, as in the treatment of any other toxemic condition. His report deals with 17 patients treated. Of these, 10 were in convulsions at the time of admission and the number of seizures is unknown, while in the other 7 cases the number of convulsions observed varied from 1 to 10 before treatment was started. The result of treatment was that 10 had no further convulsions after the first injection; 1 had 2 convulsions after the first treatment and 2 after the second; 1 had 4 attacks after the first, 4 after the second and 1 after the third injection. There was but 1 maternal death; a mortality of 5.88%, whereas his previous experience had shown a mortality of about 30%. In 1 case artificial rupture of the membranes permitted spontaneous delivery; in 1 case the membranes were ruptured and a bag inserted to induce delivery, which proceeded spontaneously; in 1 case cesarian section was done after the convulsion had been controlled. In 11 cases

spontaneous delivery occurred without any special assistance. Of the 11 babies delivered after institution of this treatment, 5 were alive, 1 was still-born at term, and 5 were still-born before full term. The following conclusions are presented:

(1) By the intravenous use of magnesium sulphate in sufficient dosage the convulsions of eclampsia can be controlled and the coma cleared up.

(2) The intravenous use of magnesium sulphate reduces edema and promotes diuresis, thus eliminating the toxins.

(3) Other eliminative measures, such as catharsis, phlebotomy, lavage and colonic flushings, may be used as adjuvants.

(4) Surgical interference with the pregnancy should not be undertaken during the eclamptic attack, except for the most urgent obstetrical indications.

From the Johns Hopkins Hospital Obstetrical Department, Wilson presents an interesting report on the comparison of results obtained after radical and after conservative treatment of eclampsia, reviewing a total of 247 cases. The first series includes 110 cases treated between 1894 and 1912; of these, 61 were of the antepartum, 24 of the intrapartum, and 25 of the postpartum varieties. There were 25 maternal deaths; 15 in the antepartum, 6 in the intrapartum and 4 in the postpartum groups—mortalities of 24.6, 25 and 16% respectively. The gross maternal mortality thus being 22.7%. In this series, immediate delivery was the object of primary importance in the antepartum and intrapartum cases and the choice of procedure depended largely upon the condition of the cervix; this involved the performance of many major surgical operations.

Since 1912, 137 cases of eclampsia have been treated along more conservative lines and with pronounced improvement in the results as regards the mother; the gross maternal mortality having been reduced about one-half. Free venesection has been the most important feature of treatment and the amount of blood withdrawn varied according to the condition of the patient; most patients showed ability to withstand loss of considerable quantities of blood without much disturbance. As much as 1000 c.c. was withdrawn in some instances; though the amount usually taken did not exceed 700 c.c.

The method of treatment followed consisted in the following: The patient was at once placed in a quiet, darkened room where there would be as little disturbance as possible. A hypodermic injection of morphin,  $\frac{1}{4}$  gr. given at once. If necessary, this was repeated, but not more than 2 doses given in the first 24 hours. After the second convulsion, venesection was performed under nitrous oxid anesthesia. Water should be given freely when the patient is conscious. Those who cannot drink should have an intravenous administration of 500 c.c. of 5% glucose solution; this may be repeated in 12 hours. A special nurse should be kept in constant attendance so long as the patient is in coma or there is any danger of coma. No attempt was made at delivery until

the cervix had been fully dilated. Under this régime the maternal mortality has fallen to 12.8%.

With reference to this conservative method, E. Speidel has suggested that the blood pressure may be used as a guide to the need for venesection; if the pressure is above 150 mm. and the convulsions continuing, withdraw 500 c.c. of blood and replace it by the same amount of glucose solution.

E. L. King, studying the abdominal cesarian sections performed at the Charity Hospital in New Orleans from 1909 to 1921, found 62 cases of eclampsia with 20 maternal deaths, a mortality of 32.26%. Since instituting the conservative form of treatment there not a single mother has been lost. His line of treatment is essentially the same as that outlined above save that the morphin administration is followed after a short period of rest by a 5 gallon colonic flush with 2.5% solution of sodium bicarbonate; the stomach is washed out, if necessary, and Epsom salts or castor oil introduced through the tube. Termination of the pregnancy is considered last of all; if the patient is in labor, or if labor supervenes during these procedures, it is allowed to continue naturally. If it does not come on, it should be induced but not, as a rule, until the convulsions have ceased and the patient's condition is improved.

#### NEONATAL MORBIDITY IN RELATION TO TOXEMIA OF PREGNANCY.

I. E. Abt, (Arch. Pediatrics, 42:415, July, 1925) gives an interesting study of the records at the Chicago Lying-In Hospital undertaken to ascertain the influence of the toxemia of pregnancy on disease conditions in the newborn baby. The available material consisted of the records of 210 cases. Toxemia occurred more frequently in primiparous than in multiparous mothers. Of the infants, 39 were born dead; 27 still-born; 12 were macerated. In this series, 82 were born at full term; 122 were more or less premature; in 22 instances information was not given. The infants who were born of eclamptic mothers showed diffuse hemorrhagic areas and also anemic and hemorrhagic necroses in the various organs, similar to the pathologic changes found in eclamptic mothers. Blood and albumen was found in the urine in some of these infants, and necrosis of the liver cells was occasionally observed.

The neonatal mortality was 24.77%. The maternal eclampsia did not seem to effect a permanent injury in infants who survived. Infantile convulsions occurred only 5 times, but it is noted that many of the mothers who had convulsions gave birth to still-born infants shortly after the eclampsia. Congenital malformations occurred 8 times and it seems possible that maternal toxemia may if it occurs early favor fetal malformations.

#### EFFECT OF ANESTHETICS UPON THE STRENGTH OF UTERINE CONTRACTIONS.

M. P. Rucker, (Jour. Lab. & Clin. Med., 10:390, 1925) obtained tracings of the contracting pregnant uterus by means of an intra-uterine Voorhees bag attached to a mercury

manometer. As a result of his studies of these tracings he believes that it is important for the obstetrician to know, not only the safety of an anesthetic for the mother and the child, but its effect upon the organic contractions. The effect of the anesthetic influences the progress of labor, the ease of intra-uterine manipulations, and the likelihood of atonic postpartum bleeding. The fact that the behavior of the uterus is often inconstant must be borne in mind. It appears that all anesthetics, with the possible exception of ethylene, have a tendency to diminish the force and frequency of contractions in proportion to the amount administered; the effect is least marked with nitrous oxid and most marked with chloroform; sacral anesthesia with novocain belongs in a class by itself. Novocain usually stops all contractions soon after it is administered but before its effect wears off the contractions return with unimpaired force.

### Communications.

#### FROM BOARD OF MEDICAL EXAMINERS.

Dr. Alexander MacAlister, Secretary, supplies us with the following items of interest:

On September 15, 1925, Lester Klein, an unlicensed chiropractor of Newark, N. J., pleaded guilty in the First District Court of Newark, to a charge of practicing medicine without a license, and judgment was entered for the penalty.

On September 22, John H. Conover, an unlicensed chiropractor of Union Hill, N. J., was tried on a third charge of practicing medicine without a license and judgment entered for the penalty and costs. Conover refused to pay the penalty and was committed to jail for 100 days.

On September 22, Philip Pabst, an unlicensed chiropractor of Kearney Avenue, Arlington, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On October 3, Cecil C. Williams and Robert Williams, unlicensed chiropractors of Hackensack, N. J., pleaded guilty to a charge of practicing medicine without a license and each paid the penalty and costs.

On October 9, LeRoy Haskins, physical instructor of Blairstown Academy, Blairstown, N. J., paid the penalty for practicing medicine without a license.

On October 14, Hannah Olson, of Ocean Grove, N. J., was tried on a charge of practicing medicine, in the Asbury Park District Court, and judgment was entered for the penalty and costs.

On October 17, Alexander Livingstone, a druggist, of Pennsgrove, N. J., pleaded guilty to a charge of practicing medicine without a license and paid the penalty and costs.

On October 14, Giacinto Cusa, a druggist, of Asbury Park, N. J., was tried on a charge of practicing medicine without a license, and judgment was reserved.



On October 9, Wendell H. Cronk, an unlicensed chiropractor, of Vineland, N. J., was tried on a charge of practicing medicine without a license, and judgment entered for the penalty and costs. Cronk refused to pay the penalty and was committed to jail for 10 days.

On October 20, Wm. J. Sweeney, Alfred C. Davis and John Kugel, unlicensed chiropractors, of Newark, N. J., were tried on charges of practicing medicine without a license, in the First District Court of Newark, and judgment entered in each case for the penalty and costs.

On October 22, Romeo Nastasia, an unlicensed chiropractor, of Long Branch, N. J., paid the penalty for practicing medicine without a license.

On October 22, Walter H. Stansbury, of Freehold, N. J., an unlicensed chiropractor was tried on a charge of practicing medicine without a license and judgment was entered for the penalty and costs.

On October 22, Frances A. Curtis, of Asbury Park, N. J., who advertised as a chiropractor and metaphysician, was tried on a charge of practicing medicine without a license and judgment was entered for the penalty and costs.

On October 22, Kathryn Quinn, of Ocean City, N. J., paid the penalty and costs for practicing medicine without a license.

On October 27, Albert N. Lalli, a licensed chiropractor, of Pennsylvania, paid the penalty and costs for practicing chiropody at Wildwood, N. J., without a license, during the summer.

On October 28, Harold E. Welsh, of Cape May, and Robert Welsh, of Wildwood, N. J., unlicensed chiropractors, pleaded guilty to a charge of practicing medicine without a license, and each paid the penalty and costs.

On October 28, Jennie Coutler, who practiced at Wildwood, N. J., during the summer, was tried in the Court of Common Pleas, Cape May Court House, on a charge of practicing medicine without a license and judgment was entered for the penalty and costs.

On October 30, John Miller, an unlicensed chiropractor, of Paulsboro, was tried in the Court of Common Pleas, Woodbury, N. J., on a charge of practicing medicine without a license, and judgment was entered for the penalty and costs.

Will send you another report on the first of December, as we have a number of cases listed for trial during November.

### Grandpa's Rating.

"That clock is very old—it's a grandfather's clock," she informed him, as she showed him over the house.

"That isn't a grandfather's clock; it's a cuckoo clock," he contradicted.

"We-e-ell," she hesitated, "you didn't know grandfather like I did."—*Amer. Legion Weekly*

## Deaths.

**BEBOUT, Theodore W.**—On November 8, 1925, on the eve of his twenty-fifth wedding anniversary, Dr. T. W. Bebout, of Long Hill Road, Stirling, New Jersey, died after an illness lasting only about a week.

Born at Long Hill fifty-two years ago, Dr. Bebout received his preliminary training in a private academy and preparatory school. He was graduated from the University of Maryland at Baltimore after taking special courses in addition to the regular medical course. The physician started practicing at Summit, but after a short time moved to Stirling, where he had practiced about twenty-five years.

In addition to his wife, he leaves a son, Joel T. Bebout of Stirling; a daughter, Miss Helen M. Bebout, a student at the Maryland College for Women, Lutherville, Md.; three brothers, Herbert, of New Providence, Elber, of Bordentown, and Edwin, of Long Hill.

**HARBERT, George.** On November 12, 1925, Dr. George Harbert, of Beverly, New Jersey, died at the University Hospital, Philadelphia, of internal injuries received in an automobile accident five days previously.

**LIPPINCOTT, Jesse D.**—On November 6, 1925, Dr. J. D. Lippincott, of 399 Summer Avenue, Newark, N. J., died suddenly of heart disease at his home. After dinner with the family, he went to his office, on the first floor and had been there but a short time when his wife, who was sitting in the library, heard him fall. She reached him but a few moments before he died.

Descendant of a long line of physicians and clergymen, Dr. Lippincott had made a mark for himself in the healing profession. He had built up a large practice and his services were in demand by a number of large business organizations in this city and vicinity. Death had stricken him at the height of his career.

Dr. Lippincott was born at Cedarville, Cumberland County, July 5, 1872. He was the son of Mrs. Debora D. Lippincott and the late Rev. Dr. Benjamin C. Lippincott. On his paternal side he was a direct descendant of William Penn and his mother's family included men who had fought in the Revolutionary War.

His early training was received in Long Branch, where his father was pastor of the Methodist Church, and Dr. Lippincott went to Philadelphia where he attended the College of Pharmacy and Jefferson College, being graduated from the latter institution in 1895. For a year he served as an interne at the Charity Hospital, Philadelphia, and in the following year married Emma Dunbar McCurdy of New Brunswick. The couple came to Newark that year and then Dr. Lippincott started to build up the practice for which he became noted.

When the World War involved the United States Dr. Lippincott closed his home and office and enlisted in the medical corps. He was assigned to duty at San Juan, Porto Rico, and eventually made a major and placed in charge



of a base hospital there. Mrs. Lippincott went there with him.

Dr. Lippincott was a member of the Centenary Methodist Episcopal Church, the State Medical Society, the Practitioners' Club, American Medical Association, Sons of the American Revolution, Kane Lodge, F. and A. M., and other organizations.

In addition to his mother, who lives in Ocean Grove, and his wife, the doctor is survived by a son, Captain J. Ralston Lippincott, now stationed at Lawton, Okla., and two grandchildren, also a sister, Mrs. Eugene McQueen of Tamworth, N. H. His brother, Rev. Benjamin C. Lippincott, pastor of Spring Lake Methodist Episcopal Church, died in July.

**STEINKE, Frank**—At the age of only 42 years, Dr. Frank Steinke, of 1060 East Jersey Street, Elizabeth, New Jersey, died suddenly of heart failure on Thursday, November 5, 1925. Dr. Steinke had been ill for about 10 days but his death was entirely unexpected and he had continued even to see some of his patients until the day of his death.

Born in Elizabeth, November 19, 1883, Dr. Steinke was the son of the late John Steinke, a merchant of Elizabeth. He received his early education in public school No. 1 and the Battin High School. He graduated in medicine from the College of Physicians and Surgeons of Baltimore, Maryland, and after having engaged in general practice for a number of years decided to specialize in diseases of the skin and radiology.

During the World War, Dr. Steinke volunteered for service and after a brief period in the army hospitals at Sea Girt, New Jersey, and Anniston, Alabama, he sailed for overseas duty with the 113th Field Hospital of the 29th Regiment. Dr. Steinke's interest in national defense continued after the war and he was commissioned as a captain in the New Jersey National Guard and assigned as Medical Officer to the First Battalion, 114th Infantry, which is stationed at Elizabeth. He was a member of the Argonne Post, American Legion, and was buried with military honors in which this Post and the State Guard participated.

At a special meeting of the Clinical Society of the Elizabeth General Hospital, the following resolutions were unanimously adopted:

"The Clinical Society of the Elizabeth General Hospital learns with deep sorrow of the death of Dr. Frank Steinke.

"Dr. Steinke was connected with the Elizabeth General Hospital and its Clinical Society since his graduation, first serving as interne in the hospital.

"His professional ability was recognized by his associates and his work with the x-ray, his chosen field, in which he was a pioneer, was of inestimable value to our institution.

"During the World War, Dr. Steinke was one of the first to respond to his country's call, serving for the entire period of the war; since then continuing his interest in the National Defense.

"In his death, the members of this society have lost an esteemed friend, his patients a beloved physician, and the community an outstanding practitioner and citizen."

## County Society Reports.

### ATLANTIC COUNTY.

Joseph H. Marcus, M.D., Reporter.

The November meeting of the Atlantic County Medical Society was held on the evening of November 13 at the Atlantic City Hospital, the meeting being called to order by the president, Dr. D. Ward Scanlan.

After dispensation of the routine business, Mr. Glendenning, of the Chamber of Commerce, was introduced. His appeal was addressed to the physicians of the county society and stressed the urgency of an increased membership in the Chamber of Commerce; emphasizing the necessity for the physicians to aid in spreading the activities of this civic institution both directly and indirectly.

The Scientific Program constituted a clinical demonstration of cases, from the wards of the Atlantic City Hospital, by Dr. A. C. Morgan, Professor of Medicine at Temple University and President of the Philadelphia County Medical Society. The following cases were presented by Dr. Morgan, in the manner of postgraduate instruction in physical diagnosis:

Case 1. Female, with diagnosis of pulmonary tuberculosis, presenting a localized unilateral infection in the right apex of the lung. He feels that 80% of these cases are tuberculous in origin and one must remember the pathology of an early tuberculous lesion at the hilus, concentrating upon the infraclavicular area and the supraspinous region posteriorly. The patient, during the examination, must be thoroughly relaxed, and it is extremely advisable to subdivide the areas on the chest, particularly observing the supraspinous region. If there are any physical signs above this line they must be interpreted as of tuberculous origin until disproven; in most cases one is correct in entertaining this attitude.

Dr. Morgan outlined the technic of the late Colonel George E. Bushnell in eliciting physical signs. The patient is instructed to: (1) Keep mouth open; (2) breathe out; (3) little cough; (4) keep breath. These procedures are easily understood by the average patient and they overcome the nasal twang as well as the elimination of signs caused by the transmission of mucus in the upper respiratory tract so frequently misinterpreted. The exhalation is to forcibly contract the air vesicles and drive the exudate out into the larger tubes, whence it is further projected by a slight cough. If there are moist crepitant râles persisting in the hilus and heard anteriorly or posteriorly one is justified in making a diagnosis of tuberculosis.

Case 2. Female, demonstrated an unusual phenomenon caused by disturbance of the phrenic nerve. The dominant feature was rapid breathing, approximating 90 to 100 per minute, with a relative lack of danger compared to severity of symptoms. This patient was operated on for gall-bladder disease 2 weeks prior to admission. Dr. Morgan stated that this manifestation was not a real dyspnea but a wavy oscillation of the chest com-

ing from the diaphragm. Dr. Charles B. Kaighn, speaking of the fluoroscopic examination, stated that the diaphragm contracted with spasmodic rapidity, the relative position not being changed, interpreting movement as one of "stuttering motion". Dr. Morgan advocated small doses of apomorphin 2 to 3 times daily; enough for sedation and not emesis.

Case 3. Male, colored, contracted lues in 1920, complaining of pain in his abdomen for the past 2 years. In 1920 patient stated that he had a gagging sensation in his throat at which time he could not speak above a whisper. The dominant feature at present is a harsh and brassy cough suggesting involvement of the recurrent laryngeal nerve, with retracting pulsation in the supraclavicular area on the right side. Systolic blood pressure on the right side was 170 mm.; on the left 174 mm.; diastolic pressure 70. Diagnosis syphilitic aortitis with a marked aortic regurgitation.

Case 4. Adult male, presented a marked flushing with cyanosis of the face and circumoral pallor; widely distended and diffused area of cardiac motion oscillating upward suggesting auricular distention. In addition, the physical signs also disclosed friction rubs over the precordium; mitral murmur chiefly systolic, with enlargement of the heart. The diagnosis was chronic adhesive pericarditis, wide-spread in origin but not a true Pick's disease. Compensation in this case is worked up to the point of tolerance. The history of this case includes a +4 Wassermann and, at the age of 2, a tuberculosis of the hip. It is well to remember that if one is tubercular in other parts of the body they most likely have tuberculosis of the lungs. The tubercle bacilli affecting the serous membranes can affect the pericardium as well. The urinary findings disclosed a large amount of albumin, many erythrocytes, few leukocytes and hyaline and granular casts. This patient had a moderate swelling of the feet and occasional calf cramps. In men and women over 50, this temporary spasm is relieved to a great extent by application of knit stockings minus those parts which cover the toes and heels and extending over the knee; they should not be tight enough to constrict peripheral circulation. The use of nitroglycerin at bed time ameliorates this distressing symptom.

Case 5. Colored adult male; 79 ounces of a clear straw colored fluid was drawn from the right chest, with a negative bacteriologic examination. Patient has +4 Wassermann, erythrocytes, leukocytes and differential count normal. Systolic pressure 166. Diastolic 160, with pulse pressure of 60. Dr. Morgan cautioned against occurrence of plural apoplexy, it being essential to have adrenalin for hypodermic medication. One must also be guarded against "edema by recoil" which also may occur through removing a large amount of fluid. At first, tapping removes enough fluid to secure relief of symptoms. The psychic factor is important in these cases; drugs advocated were adrenalin, atropin and morphin.

Complete cardiographic studies on all cases were made by Dr. Philip Marvel, Jr.; the readings being comprehensively and excellently interpreted. In the discussion of these

cases Dr. Richard Bew expressed himself as being grateful to Dr. Morgan and complimented the president upon having arranged for this type of meeting as a departure from the routine. Further discussions were by Drs. Harold Davidson, Clarence Andrews, Clyde M. Fish, Theodore Senseman, Philip Marvel, Jr., and W. Blair Stewart.

Following the scientific program, the business meeting was continued. The secretary read 3 resolutions embodying the sympathy of the County Society in the deaths of Drs. H. T. Harvey, Otis Darius Stickney and C. C. Allen.

Applications for membership were presented by Drs. C. B. Weinberg, Lawrence Wilson, R. A. Williams and R. A. Kilduffe. These applications were referred to Dr. Walt P. Conaway, Chairman of the Board of Censors. Dr. Conaway reported that Drs. W. Fox and D. N. Rappaport were recommended to membership. Reporting for the Committee on Public Health and Hygiene, Dr. W. Blair Stewart spoke in glowing terms of the splendid work being done by Dr. Henry O. Reik, Editor of the New Jersey State Medical Journal, emphasizing in particular a series of health talks being broadcast from station WHAR. Dr. Stewart held that the rejecting of the sale of the water shed to a proposed syndicate established a splendid precedent as it was extremely possible such sale would have resulted in contaminating the Atlantic City water supply. He predicted that in the very near future all Atlantic City would be supplied with artesian water for consumption. In closing, Dr. Stewart lauded the activities of the Department of Health under the capable leadership of Dr. Samuel Salasin, health officer, and urged a greater coöperation on the part of the physicians.

A vote of thanks was extended to Nellie McGurran, Superintendent of the Hospital, for the courtesy extended to the Society.

The present officers of the County Society were reelected to serve for 1926: Dr. D. W. Scanlan, of Atlantic City, president; Dr. Henry C. James, of Mays Landing, Vice-President; Dr. Edward Uzzell, of Atlantic City, Secretary-Treasurer; Dr. Joseph H. Marcus, of Atlantic City, Reporter.

The Annual Delegates elected were Drs. H. Harley, Clarence L. Andrews, Henry C. James, Philip Marvel, Jr., and Joseph H. Marcus. Alternate Delegates: Drs. S. Salasin, C. H. Shivers, James Mason, and Homer I. Silvers, of Atlantic City, and Leland S. Madden, of Pleasantville. The Board of Censors: Dr. Walt P. Conaway, chairman; Dr. David Berner. Committee on Public Health and Hygiene: Dr. W. Blair Stewart. Library Committee: Dr. Edgar Darnall.

#### Atlantic City Hospital Staff.

Joseph H. Marcus, M.D., Reporter.

The routine monthly meeting of the Atlantic City Hospital Staff was held at the Hotel Breakers on the evening of October 16. Due to the absence of the secretary, the minutes were read by Dr. James H. Mason, said minutes being approved as read.

As a mark of profound respect in the sudden death of Dr. Otis Stickney, Oto-Laryngo-



logist to the hospital, the September meeting was eliminated.

Among the various committee reports, Dr. Theodore Senseman, as chairman of the Building Committee, stated that bids for the construction of the new hospital were placed and detailed for innovations that are to be embodied in the new building. Following the appointment of a committee to draw up an appropriate set of resolutions to be sent to Mrs. Otis D. Stickney, which letter was to express the profound sympathy and grief entertained by the staff in the irreparable loss of her husband, the scientific program was presented. The following papers were read: "The Leukemias", Dr. Philip Marvel, Jr.; "Report of Medical Service", Doctors Richard Bew and S. Salasin. "Report of Surgical Service", Dr. Homer I. Silvers.

### CAMDEN COUNTY.

#### Camden City Medical Society.

Henry B. Decker, M.D., Secretary.

The regular monthly meeting of the Camden City Medical Society was held on the evening of November 10.

Drs. C. F. Becker and B. F. Buzby spoke on "Acute Anterior Poliomyelitis". Dr. Becker took up the etiology, pathology and diagnosis; Dr. Buzby the treatment, especially the surgical methods of treating the permanent palsies. The papers were complete without being too long and were well received.

The following resolutions were unanimously adopted:

Dr. W. R. Elliott, to whom death came so untimely in August of this year, while enjoying a brief vacation, was in many respects the ideal family physician. The conscientious and close application which he gave to his professional duties endeared him to many patients and secured him a large and profitable clientele.

He will be greatly missed, as is every physician who gives so unselfishly of himself as did Dr. Elliott.

Be it therefore resolved that the members of the Camden City Medical Society assembled in special meeting to do honor to his memory, cause to be entered upon the permanent records of the society this expression of our grief.

### GLOUCESTER COUNTY.

Henry B. Diverty, M.D., Reporter.

The annual business meeting of the Gloucester County Medical Society was held at the Woodbury Country Club November 19. The meeting was called to order at 9 o'clock by the president, Dr. J. Harris Underwood.

The regular routine of business was carried out, after which Dr. Elwood Downs read a paper on "The Use of the X-ray in Diagnosis", which was followed by an interesting discussion.

Dr. I. W. Knight, the state health officer, spoke a few words concerning the late outbreak of typhoid fever in Barnsboro and attributed the cause of the epidemic to potato salad served at a public supper.

Following the addresses and discussions, election of officers for the coming year was

taken up: President, Dr. H. Wilson Stout, of Wenonah; Vice-President, Dr. Wendell Burkett, of Pitman; Secretary and Treasurer, Dr. Ralph K. Hollinshed, of Westville; Reporter, Dr. H. B. Diverty; Censors, Dr. James Hunter, Jr., of Westville; Dr. Duncan Campbell and Dr. Cyrus Phillips, of Pitman. Annual Delegate to the State Medical Society, Dr. Oran Wood, Paulsboro; Alternates, Dr. Elwood Downs and Dr. Benjamin Buzby, of Swedesboro; Member of Nominating Committee of the State Society, Dr. Oran Wood; Trustees and Budget Committee, Dr. M. F. Lummis, of Pitman; Dr. David Brewer and Dr. E. M. Duffield, of Glassboro.

Those who are to represent the society at the meetings of the other county societies are: Dr. Ashcraft, Dr. Downs and Dr. Stout, for Salem County; Drs. Ashcraft, Fisler, Hunter, Diverty and Knight, for Camden County; Drs. Phillips, Wm. Brewer, Campbell and Underwood, for Cumberland County; Drs. Wood, Hunter, David Brewer, for Burlington County; Drs. Burkett, Phillips and Diverty, for Atlantic County.

Drs. H. B. Diverty, H. Wilson Stout, R. K. Hollinshed were elected for the Essay Committee.

Dr. Emma Richardson, of Camden, was present as a delegate from the Camden County Medical Society.

Dr. Harry Nelson, of the Underwood Hospital staff, was elected into full membership of the society. Dr. Nelson was formerly of Salem, but has taken up his residence in Woodbury.

The next meeting of the society will be held on December 15, and the society will be the guests of the Camden County Board of Freeholders at the opening of the Camden County Tuberculosis Sanatorium near the County House at Blackwood.

Those answering present to the roll call were: Drs. S. F. Ashcraft, Wm. Brewer, Benj. F. Buzby, Elwood E. Downs, Ralph K. Hollinshed, Jr., Frank C. Fisler, I. W. Knight, Cyrus B. Phillips, Wendell Burkett, M. F. Lummis, H. Wilson Stout, Oran R. Wood, E. M. Duffield, H. B. Diverty, J. Harris Underwood, James Hunter, Jr., David Brewer and Harry Nelson.

After the business meeting was closed, a delightful lunch was served by the steward.

### HUDSON COUNTY.

M. I. Marshak, M. D., Reporter.

The Hudson County Medical Society met at Jersey City Hospital on Nov. 4, 1925, with Dr. J. F. Londrigan presiding.

A communication was received from the Hudson County Tuberculosis League asking the society to endorse their plan of conducting a week of publicity in regard to the value of sleeping with windows open. The society passed a motion to endorse this movement.

The question of the attitude of the society on the reintroduction of the so-called "Doctor's Title" bill was reconsidered. Dr. Quigly explained that the bill was intended to clarify one defective clause in the Medical Practice Act, and he read extracts from this act and also from the proposed bill to prove his stand.



Dr. Eagleton, Past-President of the New Jersey Medical Society, then elaborated on the protection to the public and the profession that this bill would provide. Dr. Donohoe, President of the New Jersey Medical Society, stated the attitude of the State Society on this matter. After a discussion from the floor, led by Drs. Kelly and Cosgrove, a motion to instruct the Welfare Committee to push this bill was unanimously passed.

The Scientific Committee, through Dr. Jaffin, reported on the paper of Gye and Bernard on "The Filterable Virus of Chicken Sarcoma" which was read before the ninety-third annual meeting of the British Medical Society and was published in the *Lancet*, Vol. CCI, No. 5316, July 18, 1925. This work was done at the National Institute for Medical Research at Hempstead. It was made possible by the construction of an ultramicroscope by Barnard. With this microscope employing ultraviolet rays, he was able to photograph objects less than 0.2 micron in diameter. Dr. Jaffin reviewed the editorial comment on this paper and quoted especially from the editorial "Cancer and the Filterable Virus" in the *Journal of Laboratory and Clinical Medicine*, Vol. XI, No. 1, October, 1925.

Dr. Harold Hays, of New York, spoke on the "Advance in Oto-Laryngology in the Past Twenty Years". He took up the subject under the various heads followed in this report and brought out some pertinent ideas.

**Tonsils.** These are useful to the organism during the first 2 years of life and should not therefore be removed during this period, except for special indications. In adults, the tonsils should be removed for 2 reasons: (1) Local manifestations such as repeated quincy, ear or sinus attacks; (2) general manifestations such as kidney affections, cholecystitis, rheumatic diathesis and mental affections. Inspection of the tonsils is not of greatest importance; enlargement of the cervical glands and evidence of pus in the areolar tissue about the tonsil, obtained by expression, are the more important data. Cultures may show streptococci of various kinds and influenza bacilli. Methods such as x-ray and radium are useless in treatment. Excision is the only method of value. The raying methods produce a harder surgical job, because of massive fibrosis. X-rays may produce a pharyngitis sicca. He advised the use of local anesthesia in adults.

**Larynx.** In cases where hoarseness lasts over a period of a few weeks, a thorough examination must be made, even using direct laryngoscopy, in order to make a correct differential diagnosis. If carcinoma is suspected, a biopsy should be done. There is some chance for cure if proper treatment is given for cases discovered early. Once the cartilage or the glands are involved, these cases become hopeless. Endoscopy is a new development and should be done only by those who are adept in its use.

**Nose,** especially accessory sinuses. Deviated septa should not be operated upon unless special indications are present, such as marked interference with breathing or pus drainage from the sinuses. In acute conditions, nasal surgery is not indicated. In subacute or chronic sinus conditions, local immunization with

autogenous vaccine should be tried by direct application of broth culture on gauze or by spraying with an atomizer. He claims 60-70% improvement with this method and made a plea for conservative nasal surgery.

**Mastoiditis.** There are no 2 cases alike. Repeated x-ray examinations may be necessary to make a proper diagnosis. The big question in these cases is when to operate. In suspected sinus thrombosis no operation should be performed unless blood culture is positive. The use of the spinal fluid manometer will help decide on which side the thrombosis may be. If pressure of the jugular vein increases the pressure of the spinal fluid as shown by a response in the manometer, there is no occlusion on that side. In some cases, blood transfusion can be used instead of operation even if sinus thrombosis is present.

**Progressive Deafness.** The only way to prevent this affliction is to treat the children after the acute infections or repeated attacks of tonsillitis and common colds; 5% of all school children have sufficient reduction in hearing to interfere with their school work and in 50% of these children treatment is attended by good results. In adults there is no help, but further progress may be prevented by excision of the tonsils followed by eustachian massage. He also discussed the psychologic treatment of these cases.

Dr. Hays asked Dr. Eagleton to say something about researches in brain lesions following ear infections.

Dr. Eagleton stressed conservative nose and throat surgery. He stated that suppurative brain lesions following aural disease is at first local. By attacking the lesion while it is local, some cases have been saved. He also advised the use of immunized donors blood transfusion, followed by lumbar puncture.

Drs. Sullivan, Malloy, Berlin, Asch, Selinger, M. Shapiro, Maras and Hays also discussed the subject.

#### MERCER COUNTY.

A. D. Hutchinson, M.D., Secretary-Reporter.

The Annual Banquet of the Mercer County Medical Society was held in the Carteret Club on the evening of November 17. Dr. Haggerty presided over a function most enjoyable and enlivening, and 60 members with their guests were entertained with music and happy recollections of days long ago.

With the exception of adopting the amendment to the By-Laws, providing for an increase in the annual dues to \$15, and the election to membership in the society of Drs. Ben. M. Goldberg and Irving Townsend, no business was transacted.

The word "sociability" and good fellowship was the keynote for the evening's deliberations.

Dr. H. O. Reik inspired the members to a more intensive application to the necessity for coöperation in their efforts to obtain sane and safe legislation for the protection of the public at large and for the profession in particular.

Dr. Wm. A. Clark, in a reminiscent mood, gave a most delightful description of some of

the characteristics surrounding the lives of a few of the old-time practitioners. This was indeed interesting and entertaining as the present-day mannerisms have so completely obliterated many of the finer qualities so pronounced in the early '60's.

Dr. A. K. Bowman, of Princeton, spoke feelingly of the reception accorded him by his brother practitioners in the early struggle for recognition, placing particular emphasis upon the fact that in his native home a more or less austere and dictatorial attitude seemed to prevail toward the young medico.

There were several anecdotes enlarged upon by some of the younger members of the society relative to the early practice of men long to be remembered in the Annals of Medicine.

Dr. Costill made a strong plea for a full representation of our society at the State Meeting, pointing out the loss to be sustained by lack of interest in this direction.

Following the singing of "Auld Lang Syne" the society adjourned.

### UNION COUNTY.

Russell A. Shirrefs, M.D., Reporter.

At a special meeting, the Union County Medical Society adopted the following resolutions upon the loss of Dr. Frank Steinke:

Frank Steinke, M.D., a member of the Union County Medical Society for the past fourteen years, passed from his labors on November 5, 1925.

By his death, the society loses one of its active members, who served as its Treasurer for 6 years and who was always in the forefront of advanced scientific practice.

He had endeared himself to our citizens as one whose energy and patriotism were manifest on every occasion.

We mourn his loss, extend our deepest sympathy to his family and record on our minutes the great loss that has befallen our profession, and the community.

Chas. H. Schlichter, M. D.

Stephen T. Quinn, M. D.

George T. Banker, M. D.

### Summit Medical Society.

W. J. Lamson, M.D., Secretary.

The regular monthly meeting of the Summit Medical Society was held at the Canoe Brook Country Club on Friday, October 27, 1925, at 8:30 p. m., Dr. Tidaback entertaining, and the president, Dr. Baker, in the chair. All the members of the society were present except Drs. Lawrence and James. There were also several guests present.

Announcement was made of the death of Dr. Philip Embury, of Basking Ridge, on September 25, 1925. Dr. Embury had been an active member of the society since February 28, 1919, and his loss will be greatly felt. The president appointed a committee, consisting of Drs. Prout and Lamson, to draw up resolutions of sympathy to be sent to Mrs. Embury.

Dr. S. W. Eason, of Summit, was nominated for membership to fill the vacancy caused by Dr. Embury's death.

The amendment to the By-Laws, proposed at the meeting of September 10, 1925, to change the date of the regular meetings from the last Friday in the month to the last Tuesday, was then acted on, and unanimously adopted.

The president announced that it was desirable to have a larger fund in the treasury than has been customary, and on motion an assessment of \$5.00 per member was made.

The scientific portion of the meeting consisted of an x-ray film of Ulcer of the Stomach, prepared by Dr. Cole, of New York. It was a remarkable series of motion pictures, of the different varieties of gastric ulcer, and represented great care and hard work in the making.

A buffet supper closed a delightful and profitable evening.

The November meeting of the Summit Medical Society was held at the Canoe Brook Country Club on Tuesday, November 24, 1925, at 8:30 p. m., with the president, Dr. Baker, in the chair. The host of the evening was Dr. Meigh.

Twenty-two members of the society were present, and 16 guests from Morristown, Madison and other nearby towns. Minutes read and approved.

Dr. S. W. Eason, of Summit, was elected to membership in the society.

The president announced that Dr. Theodore W. Bebout, of Stirling, had died on November 7, 1925. Dr. Bebout had been a member of the society since April 30, 1909, and had always taken an active part in its affairs. A committee, consisting of Drs. Lawrence and Meigh, was appointed to draw up resolutions of sympathy to be sent to Mrs. Bebout.

The following names were placed in nomination for membership: J. F. Johnston, of Chatham, and W. J. Hallock, of Berkeley Heights.

The scientific program consisted of 4 films on Pulmonary Tuberculosis, prepared by Dr. Cole, of New York. They showed, in a remarkably clear and vivid manner, the pathology and x-ray features of the disease. The subject was discussed by Drs. Lathrope and Faven, of Morristown, and Tidaback, of Summit.

The meeting then adjourned and a buffet supper was served.

The melancholy days have come,  
The toughest of the batch,  
The B. V. D.'s are awful cool  
The woollens make you scratch.

M. I. T. Voo Doo.

A little boy was very much puzzled over the theory of evolution, questioned his mother thus: "Mother, am I descended from a monkey?"

"I don't know," the mother replied. "I never knew your father's people."

—A. T. Kines in Success Magazine.









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